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1. sp_archea:*

2. sp_bacteria

3. sp_fungi:*

4. sp_human:*

5. sp_inverteb

6. sp_mammal:*

7. sp_mhc:*

8. sp_organel!

9. sp_phage:*

10. sp_plant:*

11. sp_rodent:

12. sp_virus:*

13. sp_vortebr

14. sp_unclass
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5; Conserv
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ALIGNMENTS

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DT 01-WAY-2000 (TrEMBLrel. 14, Last annotation update)

DE HAPTOGLOBIN BETA CHAIN (FRAGMENT).

CO HAMMALIS; ENTHERIS; CARNINGERY DEAT)

RR SEQUENCE:

RR MEDLINE; 95268704

RE SEQUENCE:

20 AA; 2020 MW; F605BCC82667DC3F CRC64;

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RESULT

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AUREIN 2.5.
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MEDLINE; 95232503.
Smith A.B., Esko J.D., Hajduk S.L.;
"Killing of trypanosomes by the hum
Science 268:284-286(1995).
                                                                                  SEQUENCE.
                                                                                                                   Eukaryota; Euglenozoa; Kinetoplastida;
                                                                                                                                            Trypanosoma
                                                                                                                                                           01-MAY-2000 (TREMBLIGEL 13, 01-JUN-2000 (TREMBLIGEL 14, HAPTOGLOBIN-RELATED PROTEIN
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01-MAY-2000
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"The antibiotic and anticancer aurein peptides bell frogs Litoria aurea and Litoria raniformis Eur. J. Blochem. 0:0-0(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amidation; Antibiotic.
MOD_RES 16 16
SEQUENCE 16 AA; 165
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Eukaryota; Metazoa; C
Amphibia; Batrachia;
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Chordata: Craniata; Vertebrata; Eute
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BETA SUBUNIT (FRAGMENT).
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                  haptoglobin-related
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Q84274;
01-NOV-1996
01-NOV-1998
                                                 Ando T., Homma R., Ino Y., Ito G., Miyahara A. Okumura Y., Suko M., Haida M.;
"Is a trypsin-like protease of mites a Der f I Jpn. J. Allergy 41:704-707(1992).
SEQUENCE 20 AA; 2087 MW; 961537685DB396A2
                                                                                                                                                  01-MAY 2000 (TrEMBLrel. 13, Created)
01-MAY 2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
TRYPSIN-LIKE PROTEASE (DER F III ALLERGEN HOMOLOG) (FRAG
Dermatophagoides farinae (House-dust mite).
Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida;
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J. Gen. Virol. 68:3091-3103(1987).
EMBL; D00205; BAA00145.1; -.
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Homma R.,
                                                                                                                                                                                                                                                                                                                                                                                                                              relationship among
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    Conservative
                                                                                                                                                                                                                         PRELIMINARY;
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(TrEMBLrel. 01, Last seq
(TrEMBLrel. 08, Last ann
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75.0%;
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  Score 27; DB
Pred. No. 5.7e
2; Mismatches
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Last annotation updat
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Pred. No. 5.3e
2; Mismatches
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Pred.
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Best Local S
Matches 3
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01-JAN-1990
01-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                                              van Kammen A.;
"Characterization and nucleotide sequence of a novel gene fixW
upstream of the fixABC operon in Rhizobium leguminosarum.";
MOL. Gen. Genet. 218:536-544(1989).
-i- FUNCTION: MAY PLAY A ROLE IN A REDOX PROCESS INVOLVED IN NITROGEN
                                                                                                                                                                                  modified and this statement is not removed entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                              EMBL; X16521; CAA:
PIR; PQ0022; PQ002
                                         PROSITE; PS01065; ETF_BETA; Felectron transport; Nitrogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE;
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"Purification and characterization of a soybean flour-inducible
ferredoxin reductase of Streptomyces griseus.";
J. Bacteriol. 173:7106-7112(1991).
-1- FUNCTION: COUPLE ELECTRON TRANSFER FROM NADH TO CYTOCHROME
P450(SOY) IN THE PRESENCE OF EERREDOXIN.
-1- CATALYTIC ACTIVITY: REDUCED FERREDOXIN + NAD(+) = OXIDIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Streptomyces griseus.
Streptomyces griseus.
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Commontalos: Streptomycineae; Streptomycetaceae; Streptomyces.
                                                                                               INTERPRO;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rhizobiaceae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE.
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3; Conservative
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  AA;
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13, Last sequence of the sequence
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36, Last annotation update)
REDUCTASE (EC 1.18.1.3) (F
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THE ETF BETA-SUBUNIT / FIXA FAMILY.
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                                                                  PARTIAL.
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a soybean flour-inducible
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01-MAY-1992
01-NOV-1997
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Rebuffat S., Prigent Y., Auvin-Guette "Tricholongins BI and BII, 19-residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              spectroscopy.";
Eur. J. Biochem.
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01-MAY-1992 (Rel. 22, La
01-NOV-1997 (Rel. 35, La
TRICHOLONGIN BI AND BII
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FUNCTION: TRICHOLONGINS ARE PEPTIDES WHICH DIS AND ANTIBACTERIAL ACTIVITY. PROBABLY INTERACT MEMBRANES AND PROBABLY PRODUCES HOLES LEADING PTM: AIB IS ALPHA-AMINO ISOBUTYRIC ACID.

PTM: IVA IS ISOVALINE.
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Triakidae;

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RESULT 11
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ID SAMP_MUSCA
AC P19095;
DT 01-NOV-1990
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DE SERUM AMYLOO
OS MUSTELUS CAI
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01-NOV-1995 (
15-JUL-1998 (
TRYPSIN-LIKE
              P19095;
Ol-NOV-1990 (Rel. 16, Created)
Ol-NOV-1990 (Rel. 16, Last sequence update)
Ol-NOV-1997 (Rel. 35, Last annotation updat
SERUM AMYLOID P-COMPONENT (SAP) (FRAGMENT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kim I.S., Lee K.J.;

"Physiological roles of leupeptin and extracellular mycellum development of Streptomyces exfoliatus SMF Microbiology 141:1017-1025(1995).

-I- FUNCTION: INVOLVED IN MYCELIUM DIFFERENTIATION.
-I- SIMILARITY: BELONGS TO PEPTIDASE FAMILY S2A; AL
                                                                                                                                                                                                                                                                                                                                                 NON_TER
SEQUENCE
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01-NOV-1995 (Rel. 32, Last sequence update)
15-JUL-1998 (Rel. 36, Last annotation update)
TRYPSIN-LIKE PROTEASE (EC 3.4.21-) (FRAGMENT).
Streptomyces exfoliatus (Streptomyces hydrogenans).
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
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MEDLINE; 95291424.
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Bradford A.M., Bowie J.H.,
                                                                                                                                                                                                                                                                                                                                                                                 Hydrolase; Serine protease
                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00134; TRYPSIN_HIS; PROSITE; PS00135; TRYPSIN_SER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Actinomycetales; Streptomycineae; Streptomycetaceae;
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SEQUENCE 19 /
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                                                                                                                                                                                                                                                                                                                                                                                                                                   INTERPRO; IPRO01254; -
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36.4%;
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Pred. No. 8.2e+02;
3; Mismatches '
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exfoliatus SMF13.";
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RESULT 13
FENR_STRGR
ID FENR_STRGR
AC P24134;
DT 01-MAR-1992
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Best Local Similarity
These 3; Conserv
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Best Local S
Matches 3
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P81362;
15-JUL-1998 (Rel. 36, C
15-JUL-1998 (Rel. 36, L
15-JUL-1998 (Rel. 36, L
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SEQUENCE
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"Two-dimensional gel electrophoresis separation sequence analysis of proteins from Clostridium percenter of the protein sequence analysis of proteins from Clostridium percenter of the protein sequence analysis of protein sequence analysis of protein sequence and sequence analysis of proteins from Clostridium sequence analysis of proteins sequence analysis of pro
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Robey F.A., Tanaka T., Liu T.-Y.;

"Isolation and characterization of two major serum proteins from "Isolation and characterization of two major serum proteins from "Isolation and characterization". C-reactive protein and amyloid P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- SUBUNIT: HOMOPENTAMER. PENTAXIN (OR PENTRAXIN) HAVE A DISCOI
ARRANGEMENT OF 5 NONCOVALENTLY BOUND SUBUNITS.
-!- DISEASE: SAP IS A PRECURSOR OF AMYLOID COMPONENT P WHICH IS
IN BASEMENT MEMBRANE AND ASSOCIATED WITH AMYLOID DEPOSITS.
-!- SIMILARITY: BELONGS TO THE PENTAXIN FAMILY.
01-MAR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Clostridium pasteurianum.
Bacteria; Firmicutes; Bac
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Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes; Triakid
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3; Conserv
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1 >9 PENTAXIN.
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                                                                                                                                                                                                                                                                        14 AA;
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(Rel.
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                                  STANDARD;
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Created)
                                                                                                                                                                                                                                                                          1550 MW;
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annotation update)
2D-PAGE (FRAGMENT).
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Pred. No. 8.8e+04;
3; Mismatches 2;
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Pred. No.
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01-FEB-1994 (Rel. 2
01-NOV-1995 (Rel. 3
COLLAGENOLYTIC PRO1
                                                                                                                                                                                                                                                                                                                                 _CHIOP
                                                       Klimova O.A., Vedishcheva Y.V., Strongin A.Y.;
"Isolation and characteristics of collagenolytic enzymes f
hepatopancreas of the crab Chionoecetes opilio.";
Dokl. Akad. Nauk SSSR 317:482-484(1991).
'!- FUNCTION: THIS ENZYME IS A SERINE PROTEASE CAPABLE OF
THE NATIVE TRIPLE HELIX OF COLLAGEM.
-!- CATALYTIC ACTIVITY: BROAD SPECIFICITY; DEGRADES NATIVE
-!- SIMILARITY: BELONGS TO PEPTIDASE FAMILY S1; ALSO KNOWN
                                                                                                                                                                                                                   Chionoecetes opilio (Crab-beetle).

Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca; Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _UPEIN
                                     HSSP;
                                                                                                                                                           MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Adams G.W., Severini C.;

"Novel uperin peptides from the dorsal glands of the austra floodplain toadlet Upercleia inundata.";

Aust. J. Chem. 49:475-484(1996).

1. FUNCTION: SHOWS A MEDIUM ANTIBACTERIAL ACTIVITY AGAINST

L. MESEMTERIODES AND S. UBERIS.

1. TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.

1. MASS SPECIFICITY: WW-1974; METHOD-FAB.

Amphibian skin; Antibiotic.

Amphibian skin; Antibiotic.

SEQUENCE 19 AA; 1975 MW; 2F34EF077BA35B70 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Uperoleia inundata (Floodplain toadlet)
Eukaryota; Metazoa; Chordata; Craniata;
Amphibia; Batrachia; Anura; Neobatrachia
INTERPRO; IPRO01254; PROSITE; PS00134; TR) PROSITE; PS00135; TR)
                                                                                                                                                                       TISSUE=HEPATOPANCREAS;
                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                           Eubrachyura;
                                                                                                                                                                                                                                                                                                          P341<del>5</del>3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bradford A.M., Raftery M.J.,
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30-MAY-2000 (Rel.
30-MAY-2000 (Rel.
                                                                                                                                                                                                                                                                                                                    COG1_CHIOP
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                                              TRYPSIN FAMILY.
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                                                                                                                                            Vedishcheva Y.V.,
                                                                                                                                                                                                                                               el. 28, Created)
el. 28, Last sequence update)
el. 32, Last annotation update)
PROTEASE 25 KDA II/III (EC 3.4.
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TRYPSIN_HIS;
TRYPSIN_SER;
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39,
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Last annotation updat
                                                                                                                                                                                                          Majidae;
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Neobatrachia; Bufonoidea; Myobatrachidae;
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Pred. No.
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PARTIAL.
                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                         Chionoecetes.
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                                                                                                                                                                                                                                                    .21.32) (FRAGMENT).
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                                                                                                                                                                                                                      Brachyura;
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                                                          O KNOWN
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UP27_UPEMJ
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CPAX_BOVIN
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Best Local
                  UP27_UPEMJ
P82039;
30-MAY-2000
30-MAY-2000
30-MAY-2000
UPERIN 2.7.
                                                                                                                                                                                                               VARIANT
NON_TER
SEQUENCE
                                                                                                                                                                                                                                              NON_TER
 Uperoleia mjobergii
Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                              "Identification and biochemical analysis of novel olfactory-specific cytochrome P-450IA and UDP-glucuronosyl transferase.";
Biochemistry 29:7433-7440(1990).

-!- FUNCTION: CYTOCHROMES P450 ARE A GROUP OF HEME-THIOLATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-AUG-1991 (Rel. 19, Last sequence up 15-DEC-1998 (Rel. 37, Last annotation CYTOCHROME P450 2A (OLF2) (OLFACTIVE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hydrolase;
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01-AUG-1991
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                                                                                                                                                                                                                                                                                                                CATALYTIC ACTIVITY: RH + REDUCED FLAVOPROTEIN + O(2) = ROH + OXIDIZED FLAVOPROTEIN + H(2)O. SUBCELLULAR LOCATION: MEMBRANE-BOUND. ENDOPLASMIC RETICULUM. SIMILARITY: BELONGS TO THE CYTOCHROME P450 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                  MONOOXYGENASES. IN LIVER MICROSOMES, THIS ENZYME IS INVOLVED IN AN NADPH-DEPENDENT ELECTRON TRANSPORT PATHWAY. IT OXIDIZES A VARIETY OF STRUCTURALLY UNRELATED COMPOUNDS, INCLUDING STEROIDS, FATTY
                                                                                                                                                                                                                                                                                                                                                         ACIDS, AND XENOBIOTICS.
                                                                                                                         QQAFKELQG
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(Rel. 37, Last annotation
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 (Australian toadlet).
Chordata; Craniata; V
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5.5e+02;
Vertebrata;
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 Euteleostomi;
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RESULT 2
COCO_LIMPO
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Best Local S
Matches 4
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P81071;
01-NOV-1997
01-NOV-1997
30-MAY-2000
  NON_TER
                                                                                                                                                                                   MEDLINE; 78037243.
Law J.H., Dunn P.E., Kramer K.J.;
"Insect proteases and peptidases.";
Adv. Enzymol. Relat. Areas Mol. Biol. 45:389-425(1977)
-I- CATALYTIC ACTIVITY: PREFERENTIAL CLEAVAGE: ARG-, L.
                                                                      TRYPSIN TOWNS OF THE PROSITE: PRO01354; TRYPSIN_HIS; PARTIAL. PROSITE: PS00134; TRYPSIN_SER; PARTIAL. PROSITE: PS00135; TRYPSIN_SER; PARTIAL. PROSITE: PS00135; TRYPSIN_SER; Digestion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
COCOONASE (EC 3.4.21.-) (FRAGMENT).
Limulus polyphemus (Atlantic horseshoe crab).
Likaryota; Metazoa; Arthropoda; Chelicerata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
030-MAX-2000 (Rel. 39, Last annotation update)
TRYPSIN PRECURSOR (EC 3.4.21.4) (FRAGMENT).
                                                                  Hydrolase;
PROPEP
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PROSITE; PS00134; TRYPSIN_HIS;
PROSITE; PS00135; TRYPSIN_SER;
                                                                                                                                                                                                                                                                                                                          MEDLINE: 97235546.
                                                                                                                                                                                                                                                                                                                                                TISSUE-PANCREAS;
                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Felis silvestris catus (Cat)
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NON_TER
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1 IVGGF 5
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nes 4; Conserv
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SIMILARITY: BELONGS TO
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Eutheria;
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ΑĄ,
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O PEPTIDASE FAMILY S1; ALSO KNOWN AS
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Pred. No.
A6D751BB58760A86 CRC64;
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                                                             ACTIVATION
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Felis.
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UP22_UPEIN STAN
ID UP22_UPEIN STAN
AC P82028;
DT 30-MAY-2000 (Rel. 3
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DT 30-MAY-2000 (Rel. 3
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                                                                                                                                                                                                                                                                                                                                                                                                                     Allergen.
NON_TER
SEQUENCE
                                         Bradford A.M., Raftery M.J., Bowie J.H., Adams G.W., Severini C.;
"Novel uperin peptides from the dorsal gl floodplain toadlet Upercleia inundata.";
Aust. J. Chem. 49:475-484(1996).
-!- FUNCTION: SHOWS A WEAK ANTIBACTERIAL E.COLI, L.MESENTERIODES, L.INNOCUA, M.S. AUREUS AND S.UBERIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALL7_OLEEU STANDARD; PRT;
P81430;
30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence up
30-MAY-2000 (Rel. 39, Last annotation
POLLEN ALLERGEN OLE E 7 (OLE E VII) (F
-i- TISSUE SPECIFICITY: SECRETED
-i- MASS SPECTROMETRY: MW-1926; M
Amphibian skin; Antibiotic
SEQUENCE 19 AA; 1927 MW; 3283
                                                                                                                                                                          Uperoleia inundata (Floodplain toadlet).
Eukaryota; Metazoa; Chordata; Craniata;
Amphibia; Batrachia; Anura; Neobatrachia
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tejera M.L., Villalba M., Rodriguez "Isolation and characterization of tree pollen.";
Submitted (JUL-1998) to the SWISS-PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Olea europaea (Common olive).
Eukaryota; Viridiplantae; Embryophyta; Trachec
Magnoliophyta; eudicotyledons; core eudicots;
                                                                                                                                TISSUE-SKIN SECRETION;
                                                                                                                                            SEQUENCE,
                                                                                                                                                             Uperoleia
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cytochrome P450 olf2 - bovine (fragment)
N:Contains: oxidoreductase (EC 1.-.-)
C:Species: Bos primigenius taurus (cattle)
C:Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 12-Mar-1999
C:Accession: A35704
R:Lazard, D.; Tal, N.; Rubinstein, M.; Khen, M.; Lancet, D.; Zupko, K.
Biochemistry 29, 7433-7440, 1990
A:Title: Identification and biochemical analysis of novel olfactory-specific cytochrome
A:Reference number: A35704; MUID:91027757
A:Accession: A35704
                                                                                                                                                                                                                                                                                                            A:Gene: CYP2A
C:Superfamily: human cytochrome P450 CYP2D6; cytochrome P450 homology
C:Keywords: electron transfer; heme; monooxygenase; oxidoreductase; transmembrane protei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein QA300027 - Arabidopsis thaliana (fragment)
C:Species: Arabidopsis thaliana (mouse-ear cress)
C:Date: 30-Jun-1992 #sequence_revision 06-Jan-1995 #text_change 06-Jun-1997
C:Accession: PA0026
R:Kamo, M.; Kawakami, T.; Miyatake, N.; Tsugita, A.
submitted to JIPID, July 1994
A:Description: Separation and characterization of Arabidopsis proteins by two-dimensional A:Reference number: PA0001
A:Accession: PA0026
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Search completed: December 21, 2000, 08:30:07 Job time: 271 sec
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A; Residues: 1-15 <KAM>
A; Experimental source: leaf
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Matches 4; Conservative
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Best Local Similarity 45.5%;
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Pred. No. 1.4e+03;
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hypothetical THRA1/BTR mutant fusion protein, cell line BT474 - C;Speciles: Homo sapiens (man) C;Date: 21-Feb-1997 *sequence_revision 21-Feb-1997 *text_change C;Accession: I52698 R;Futreal, P.A.; Cochran, C.; Marks, J.R.; Iglehart, J.D.; Zimme
                                                                            RESULT
I52698
                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-20 <DEN>
A; Residues: 1-20 <DEN>
A; Cross-references: GB:M27225; NID:g339373; PIDN:AAA61099.1; PID:g553781
C; Superfamily: immunoglobulin C region; immunoglobulin homology
C; Keywords: T-cell receptor
                                                                                                                                                                                                                                                                                                                                          R; Dent, A.L.; Fink, P.J.; Hedrick, S.M.
J. Immunol. 143, 322-328, 1989
A;Title: Characterization of an alternative
A; Reference number: A45806; MUID:89278666
A; Accession: A45806
A; Status: preliminary
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C; Date: 30-Sep-1993 #sequence_revision
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A:Title: Hypodermin B, a trypsin-related enzyme A;Reference number: A20190; MUID:83261874
A;Accession: A20190
A;Molecule type: protein
A;Residues: 1-16 <LEC>
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C;Species: Hypoderma lineatum (early cattle grub)
C;Date: 05-Jun-1987 #sequence_revision 05-Jun-1987
C;Accession: A20190
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5; Mismatches 5;
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Zimmerman, W.; Barrett,
                             20-Apr-2000
                                                       human (fragment)
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A; Residues: 1-14 <CAS>
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Blochem. Blophys. Res. Commun. 204, 357-365, 1994
A;Title: Characterization of high-molecular-mass h
A;Reference number: PC2238; MUID:95032120
A;Accession: PC2241
A;Molecule type: protein
A;Residues: 1-17 <HATP
C;Keywords: heat ~h--*
                                                                                                                                                                                                                                                                T-cell receptor alpha chain (clone A24/PEG2) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change C;Accession: PH1448
E;Casanova, J.L.; Martinon, F.; Gournier, H.; Barra, C.; Pannet B;Casanova, J.L.; Martinon, F.; Gournier, H.; Barra, C.; Pannet J. Exp. Med. 177, 811-820, 1993
A;Title: T cell receptor selection by and recognition of two cl
                                                                                                              A; Experimental source: cytolytic T-lymphocyte C; Superfamily: immunoglobulin homology C; Keywords: receptor; T-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Species: Mus musculus (house mouse)
C;Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 17-Mar-1999
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A;Map position: 17q11.2
C;Keywords: fusion protein
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A;Residues: 1-15 <FUT>
A;Cross-references: GB:S71020; NID:g546111; PIDN:AAB30341.1; PID:g546112
C;Comment: This sequence is the chimeric product of a deletion or translocation
                                                                                                                                                                                                                          A; Reference number: PH1430; A; Accession: PH1448
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A; Accession: I52698
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1; Mismatches
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C:Species: Pseudomonas sp.
C;Date: 20-Jul-1990 #sequence_revision 20-Jul-1990 #text_change 10-Feb-1995
C;Accession: C34917
R;Nakal, C.; Horlike, K.; Kuramitsu, S.; Kagamiyama, H.; Nozaki, M.
J. Biol. Chem. 265, 660-665, 1990
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                                                                                                                                                                                            A; Molecule type: protein A; Residues: 1-20 <NAK> C; Keywords: heterodimer;
                                                                                                                                                                                                                                                          J. Biol. Chem. 265, 660-665, 1990
A:Title: Three isozymes of catechol 1,2-dioxygenase A:Reference number: A34917; MUID:90110118
A:Accession: C34917
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A:Title: Identity of brain-associated small cell lung cancer antigen A; Reference number: A61392; MUID:92046737
A; Accession: A61392
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%;Alternate names: BASCA
C:Species: Homo sapiens (man)
C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Sep-1994
C:Accession: A61392
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A;Molecule type: protein
A;Residues: 1-12 <WEB>
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                                                                       Treell receptor alpha chain (clone A24/PEF5) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 11-Apr-1995
C;Accession: PH1436
R;Casanova, J.L.; Martinon, F.; Gournier, H.; Barra, C.; Pannetier, C.; Regr
J. Exp. Med. 177, 811-820, 1993
A;Title: T cell receptor selection by and recognition of two class I major |
A;Reference number: PH1430; MUID:93171821
A;Accession: PH1430; MUID:93171821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Accession: B61168
R;Kramer, K.J.; Felsted, R.L.; Law, J.H.
J. Biol. Chem. 248, 3021-3028, 1973
A;Title: Cocoonase. V. Structural studie.
A;Reference number: A61168; MUID:7316654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Molecule type: protein
A;Residues: 1-5 <KRA>
C;Keywords: hydrolase; serine proteinase; zymogen
E;1-5/Product: cocoonase (fragment) #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cocoonase (EC 3.4.21.) - Chinese oak silkmoth (fragment) C;Species: Antheraea pernyi (Chinese oak silkmoth) C;Date: 10-Mar_1994 #sequence_revision 10-Mar_1994 #text_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Description: seed storage protein
A;Description: seed storage protein
A;Note: lectin for D-galactosyl-beta-l->3-N-acetylgalactosamine, a tumor-associated
C;Company Note Protestramer; lectin; seed; storage protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Experimental source: seed C; Complex: heterotetramer; 1 C; Function:
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Blochim. Blophys. Acta 1156, 219-222, 1993
A;Title: The alpha- and beta-subunits of the jacalins are cleavage products from a 17
A;Reference number: S29635; MUID:93152601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       jacalin beta-I chain - Artocarpus champeden (fragment)
C;Species: Artocarpus champeden
C;Date: 19-Mar-1997 #sequence_revision 17-Jul-1998 #te:
C;Accession: S29636
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                                     A; Molecule type: mRNA
A; Residues: 1-15 < CAS
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Best Local Similarity
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56.2%;
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Pred. No. 1.8e+05;
1; Mismatches (
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Pred. No. 5.9e+02;
1; Mismatches 5;
                                                                                                                      recognition of two class I major histocompa
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C.; Regnault,

20

1;

Gaps

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Minimum
Maximum
                     Post-processing: Minimum Match
Maximum Match
Listing first
Database :
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Perfect score:
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DB
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Gapop 10.0 , Gapext 0.5
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102
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PIR_65:*
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Copyright (c) 1993 - 2000
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t 45 summaries
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Compugen Ltd
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

pir1:*
pir2:*
pir3:*
pir4:*

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	89	7	0	υ	4	ω	2	Ľ	NO.	•
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trypsin-like prote		aldine oxid	otein	trypsin (EC 3.4.21	ferredoxinNADP+	gingipain fo	l receptor		l recepto	т	ĸ		trypsin-like prote	cytochrome P450 ol	protein QA300027 -		н	netical THE			ceptor	e (EC 3	jacalin beta-I cha	×	n-a	I DNA methyl	major merozoite su	leukocyte elastase	Description	

ALIGNMENTS

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leukocyte elastase (EC 3.4.21.37) - dog (fragment)
C;Species: Canis lupus familiaris (dog)
C;Jate: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 17-Mar-1999
C;Accession: A60551
R;Axelsson, L.; Bergenfeldt, M.; Bjoerk, P.; Olsson, R.; Ohlsson, K.
Scand. J. Clin. Lab. Invest. 50, 35-42, 1990
A;Title: Release of immunoreactive canine leukocyte elastase normally and in endotoxi
A;Reference number: A60551; MUID:90193608
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                                   Qy
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A;Residues: 1-16 <AXE>
C;Superfamily: trypsin; trypsin homology
C;Keywords: hydrolase; leukocyte; lysosome;
                                                                                                                                                                           A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-17 <HEI>
C;Keywords: surface antigen
                                                                                                                                                                                                                                                       Biol. Cell 64, 205-214, 1988
A;Title: Isolation and functional characterization of Plasmodium
A;Reference number: A61557; MUID:89150734
A;Accession: A61557
                                                                                                                                                                                                                                                                                                                                                        major merozoite surface antigen - malaria parasite (Plasmodium falciparum) (strain Fc C;Species: Plasmodium falciparum C;Date: 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 09-Jun-2000 C;Accession: A61557
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Best Local Similarity
Watches 5; Conserv?
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Best Local Similarity 50.
Matches 6; Conservative
4 ESYQELVAVTPS 15
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1 IVGGRPAQ 8
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50.0%;
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                                                                            Score 27; DB
Pred. No. 2.7e-
2; Mismatches
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Pred. No. 1.2e+02;
2; Mismatches 1
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2.7e+02;
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SEQUENCE CHARACTERISTICS:
LENGTH: 11 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-286-889-15
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Best Local Similarity 55.0
Matches 5; Conservative
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APPLICANT: Gallath, W. Michael
APPLICANT: Gallath, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 572853el Human 2 Integrin Alpha Subunit
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: p38,659
REFERENCE/DOCKET NUMBER: 27866/32168
TELEPOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPHONE: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILLING DATE: 23-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                    CURRENT APPLICATION DATA: APPLICATION NUMBER: US FILING DATE:
                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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STREET: 233 SO
CITY: Chicago
STATE: Illinoi:
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CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                CITY: Chicago
STATE: Illino:
                                                                                                                                                                                                                                                                                                   COUNTRY: United States ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: United States
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                                                                                                                                                                                                                                                                                                                                             Illinois
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33 South Wacker Drive, 6300 Sear Tower
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55.6%;
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Pred. No. 44;
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; TYPE: amino acid; TOPOLOGY: linear; MOLECULE TYPE: peptide US-08-485-618-15
                                                                                                       QY
                                                                                                                       Query Match
Best Local Similarity
Thes 5; Conserve
Search completed: December 21, 2000, 08:31:50 Job time: 373 sec
                                                                            В
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCUMEN: 38,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US (FILING DATE: 5-AUG-1994 PRIOR APPLICATION DATA: APPLICATION NUMBER: US (
                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 11 amino acids
                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
                                                                         1 VFQEXGAGF 9
                                                                                                        3 IFQEVVGGF 11
                                                                                                                                       Conservative
                                                                                                                                                      26.5%;
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                                                                                                                                                    Score 27; DB 1; Length 11; Pred. No. 44;
                                                                                                                                                                                                                                                                                                                                                                                        27866/32797
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 26, Application US/08669284B Patent No. 5939534
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                                                                                                  TELEFAX: (202)293-786 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Inoue, ...
APPLICANT: Kikuchi, Kaoru
APPLICANT: Ishige, Yoko
                                                                                                                                                    NAME: Nakamura, Dean H.
REGISTRATION NUMBER: 33,981
REFERENCE, DOCKET NUMBER: 0-42041
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 06
FILING DATE: 02-AUG-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/669,284B FILING DATE: 28-JUN-1996 PRIOR APPLICATION DATA: PCT/JP94/02269 FILING DATE: 27-DEC-1994 PRIOR APPLICATION NUMBER: PCT/JP94/02269 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 12 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                        APPLICATION NUMBER: JP 05-350934 FILING DATE: 29-DEC-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
MOLECULE TYPE:
                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: NO. 5939534uchi, Hiroshi
TITLE OF INVENTION: NOVEL HUMAN CILIARY NEUROTROPHIC FACTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Kimura, Toru
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                  TOPOLOGY:
                                STRANDEDNESS
                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: JP 06-268281 FILING DATE: 05-OCT-1994
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                                                                   LENGTH:
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                                                  amino acid
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                                                                 8 amino acids
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                                                                                                                      (202)293-7860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
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No. 5939534uchi, Hiroshi
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75.0%;
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Pred. No.
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32;
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; TOPOLOGY: linear
; MOLECULE TYPE: pept
US-08-173-497-15
                                                                                                                               RESULT 14
US-08-286-889-15
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                                                                                              ; Sequence 15, Application US/08286889
; Patent No. 5470953
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GENERAL INFORMATION:
APPLICANT: Gallatin, W. Mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5470953el Human
NUMBER OF SEQUENCES: 51
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                         Matches
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Patent No. 5
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                                                                                                                                                                                                                                                                                    Query Match
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Best Local 9
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MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatable
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/173,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: No. 5437958and, Greta
REGISTRATION NUMBER: 35,302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Gallatin, W. Michael
APPLICANT: Van Der Vieren, Monica
TITLE OF INVENTION: No. 5437958el Human
TITLE OF INVENTION: Subunit
                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 11 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 312-4,
TELEX: 25-3856
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les 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: Marshall, O'Toole, Gerstein,
233 S. Wacker Drive, 6300 Sears
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
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55.6%;
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Pred. No. 1
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                                2 Integrin Alpha Subunit
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                                                                                                                                                                                                                                                                                   Length 11;
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
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ATTORNEY/AGENT INFORMATION:
NAME: Winter, Robert B.
REFERENCE/DOCKET NUMBER:
INFORMATION FOR SEQ ID NO: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/622,720A
FILING DATE:
                                                                                                                                                                            ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el Human 2 Integrin Alpha
NUMBER OF SEQUENCE: 114
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
PRIOR APPLICATION DATA
               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,889
FILING DATE: 5-AUG-1994
                                                                     CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/173,497
FILING DATE: 23-DEC-1993
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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CITY: 1
STATE:
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Local Similarity 53.8%;
nes 7; Conservative
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STATE: Illinois
                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                     COUNTRY:
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: California
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1840 Dehavilland Drive
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Pred. No.
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                                                                                   COMPUTER: ISH PC COMPACTIBLE
COMPUTER: ISH PC COMPACTIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOETWARE: PATENTIAN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/666,473
FILING DATE: 19-SEP-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/JP95/02238
FILING DATE: 01-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-22101
FILING DATE: 09-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-269111
FILING DATE: 01-NOV-1994
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REGISTRATION NUMBER: 1967/837
TELECOMMUNICATION TABLES

REFERENCE/DOCKET NUMBER: 16887/837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 114, Application US/08666473 Patent No. 5843713
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Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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REFERENCE/DOCKET NUMBER: 278
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: PEPTIDE SEQUENCE THAT FORMS MUCIN SUGAR TITLE OF INVENTION: CHAIN AND TECHNIQUE FOR MODIFYING PROTECTIVE OF INVENTION: WITH MUCIN SUGAR CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: YOSHIDA, Aruto
APPLICANT: TAKEUCHI, Makoto
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ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
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                                    TELEFAX:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 IFQEVVGG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: Foley & Lardner
3000 K Street, N.W., Suite 500
                                    (202)672-5399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
SEQ ID NO:
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75.0%;
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Pred. No.
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Best Local Similarity 45.9
Matches 5; Conservative
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GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
INFORMATION FOR SEQ ID NO:
                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/468,545B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 69
CORRESPONDENCES ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
                               TELECOMMUNICATION INFORMATION: TELEPHONE: (206) 622-4900
                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                 STREET: 6300 (CITY: Seattle STATE: Washing
                                                                        REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C5
                                                                                           NAME: Sharkey, Richard G. REGISTRATION NUMBER: 32,6
                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/01
FILING DATE: 07-JUN-1995
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                  (206)
                682-6031
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Pred. No.
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              US-08-622-720A-23
Sequence 23, Application US/08622720A
Patent No. 5814308
GENERAL INFORMATION:
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                                                                                      RESULT
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Best Local Similarity 45.9
Matches 5; Conservative
                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (206) 682-60 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,680B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 92
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS: LENGTH: 15 amino acids
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CORRESPONDENCE ADDRESS:
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APPLICANT: Zhang, Ke
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                                                                                                                                        GAMPNQAQMRI 11
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45.5%;
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                                                                                                                                                                                                                           Score 31; DB 3;
Pred. No. 12;
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; TYPE: am ; TOPOLOGY: US-08-467-083-41
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5219991-8
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Best Local Similarity
7; Conserva
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                                        APPLICATION NUMBER: US 08/414,417

FILING DATE: 06-JUN-1995

ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C2

TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
TELEX: 3723836 SEEDANBERRY
INFORMATION FOR SEQ ID NO: 41:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;Patent No. 5219991
; APPLICANT: LEONARD, EDWARD;SKEEL, ALISON H.;YOSHIMURA.
;TEIZO;APPELLA, ETTORE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO:8:
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Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                     CLASSIFICATION: 424
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/414,417
                                                                                                                                                                                                                                                                                                                                                                        ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/NEU PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/NEU ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: MACROPHAGE STIMULATING PROTEIN NUMBER OF SEQUENCES: 12
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 6300 COCTY: Seattle STATE: Washing: COUNTRY: US
                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/467,083 FILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/OFILING DATE: 21-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 20
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                                    amino acid
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Pred. No. 11;
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US-08-486-348A-41

US-08-486-348A-41

Sequence 41, Application US/08486348A

Patent NO. 5846538

GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.

TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN

TITLE OF INVENTION: FOR DIACNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE

TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED

NUMBER OF SEQUENCES: 69

CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Watches 5; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 5
US-08-414-417B-41
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Best Local S
Matches 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/414
ETLING DATE: 31-MAR-1995
CLASSIETCATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION UNMBER: 32,629
REFERENCE/DOCKET NUMBER: 9200
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (206) 682-603 INFORMATION FOR SEQ ID NO:
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APPLICANT: Disis, Mary L.

TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN

TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH

TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED

NUMBER OF SEQUENCES: 69

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
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CITY: Seattle
STATE: Washington
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nes 5; Conservative
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Seed and Berry LLP
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1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
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US-08-466-680B-41
US-08-666-473-114
US-08-666-473-114
US-08-666-473-114
US-08-669-284B-26
US-08-15-15
US-08-15-15
US-08-15-15
US-08-286-89-15
US-08-485-618-15
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Sequence 87, Appl Patent No. 5219991
Sequence 41, Appl Sequence 112, Appl Sequence 114, Appl Sequence 115, Appl Sequence 15, Appl Sequence 17, Appl Sequence 19, Appl Sequence 106, 
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	Length 19 5; Indels	;YOSHIMURA. PROTEIN	Length 14			
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SEQUENCE
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SEQUENCE FROM N.A.
MEDLINE; 94348501.
Arakawa H., Hayashi N., Nagase H., Ogawa M., Nakamura Y.;
Alternative splicing of the NF2 gene and its mutation analysis breast and colorectal cancers.";
breast and colorectal cancers.";
Hum. Mol. Genet. 3:565-568(1994).
EMBL; S73854; AAB31737.1;
NON_TER
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Q9TRH5; Q1-MAY-2000 (TrEMBLrel. 13, Created)

Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)

Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)

ALPHA-S1-CASEIN HOWOLOG (FRAGMENT).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
[1]
                                                                                                                                                                                                          SEQUENCE.

MEDLINE; 93231344.

Neutoboom B., Gluffrida M.G., Conti A.;

"Isolation of a new ligand-carrying casein fragment from bovine mammary gland microsomes.";

FEBS Lett. 305:189-191(1992).

SEQUENCE 17 AA; 1950 MW; 8890EF0685A0537F CRC64;
                                                                                                                                                                                                                                                                                                                                           Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
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               2000, 08:35:34
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Pred. No. 1.6e+03;
1; Mismatches 4
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Q9UC91;
01-MAY-2000
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"Onco-fetal/laminin-binding collagen from colon carc. of new sequences.";
Biochem. Biophys. Res. Commun. 207:852-859(1995).
SEQUENCE 17 AA; 1710 MW; E6805580DA20B55E CRC64;
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Eukaryota; Metazoa; C
Mammalia; Eutheria; F
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
0NCOFETAL-LAMININ BINDING COLLAGEN ALPHA 1(III)CHAIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hayes F., Lubetzki S.A., Sherratt D.J.;
"Salmonella typhimurium specifies a circular resolution system which is homologous to the recombination system of Escherichia coli.";
Gene 198:105-110(1997).
EMBL; U92525; AAC45779.1; -.
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SEQUENCE 17 AA; 20
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Bacteria; Proteobacteria;
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01-JUL-1997 (TrEMBLrel. 04, Last sequence up
01-NOV-1999 (TrEMBLrel. 12, Last annotation
HYPOTHETICAL PROTEIN (ORF238) (FRAGMENT).
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Catarrhini;
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1.1e+03;
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5.2e+02;
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SEQUENCE
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Genomics 37:211-218(1996)
EMBL; X95522; CAA64776.1;
NON_TER 17
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MEDLINE; 97079687.
Loebbert R.W., Winterpacht A.,
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-MAY-1997 (TrEMBLrel. 03, Last annotation update)
CYCLIC NUCLEOTIDE PHOSPHODIESTERASE (FRAGMENT).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insec
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata;
Bombycoidea; Bombycidae; Bombyx.
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INTERPRO; IPRO01254; -.
PFAM; PF00089; trypsin;
SEQUENCE 20 AA; 2205
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l; Mismatches
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Pred. No. 1.3e+03
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                                                                                           PRT;
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Eukaryota; Viridiplantae;
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Eukaryota; Viridipjantae; Embryophyta; Tracheophyta;
Magnoliophyta; eudicotyledons; Rosidae; eurosids I; l
                                                                                                                                                                                                                                                                                            Yu H., Davis T.M.;
"Genetic relationships
alcohol dehydrogenase (
Genome 0:0-0(1997).
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EMBL; AF000219; AAC36546.1;
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FPRIYGHEA
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6; Conserv
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YDROGENASE (EC 1.1.1.1) (ALDEHYDE REDUCTASE)
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7 AA;
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Rosales; Rosace
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Eukaryota; Viridiplantae;
Magnoliophyta; eudicotyle
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Genome 0:0-0(1997).
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Yu H., Davis T.
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STRAIN=YELLOW WONDER,
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EMBL; AF000216; AAC36543.1;
EMBL; AF000214; AAC36541.1;
                                                                                                                                           Yu H., Davis T.M.;
                                                                                                                                                                           Fragaria.
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EMBL; AF000214;
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eudicotyledons; Rosidae;
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 Score 27; DB Pred. No. 4.9e. 0; Mismatches
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; eurosids I;
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Rosales; Rosaceae;
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Best Local Similarity 66.
Matches 4; Conservative
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01-NOV-1998 (TrEMBLrel. 08, Cr
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01-NOV-1998 (TrEMBLrel. 08, Li
ALCOHOL DEHYDROGENASE (EC 1.1
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ALCOHOL DEHYDROGENASE (EC
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SEQUENCE
   Eukaryota;
                         Fragaria vesca
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Eukaryota; Viridiplantae; Embryophyta; Tracheophyta;
Magnoliophyta; eudicotyledons; Rosidae; eurosids I; !
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EMBL: M26144; AAA74588.1; -.
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.1.1.1) (ALDEHYDE REDU
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Eukaryota; Viridiplantae; Embr
Magnoliophyta; eudicotyledons;
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-!- CATALYTIC ACTIVITY: AN AN
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Fragaria.
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Yu H., Davis T.M.;
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AF000217; AAC36544.1;
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1.1.1.1) (ALDEHYDE REDUCTASE)
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Pred. No. 4.9e
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SPTREMBL_14:*
1: sp_archea:*
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3: sp_fungi:*
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5: sp_inverteb:
6: sp_manmal:*
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Q31851
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                       006946 salmonella
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Q14001 homo sapien
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Q31851 arabidopsis
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Q9R517;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation updat
                                                                                                                      Q14182
Q14182;
Q1-NOV-1996
Q1-NOV-1996
Q1-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kretzer A., Frunzke K., Andreesen J.R.;
"Catabolism of isonicotinate by Mycobacterium sp. IN/
description of the pathway and purification of the mo
isonicotinate dehydrogenase.";
J. Gen. Microbiol. 139:2763-2772(1993).
SEQUENCE 19 AA; 2215 MW; 6A4FB97459902F0B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mycobacterium.
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Actinomycetales; Corynebacterineae; Mycobacteriaceae.
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   Eukaryota;
      Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
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3 (FRAGMENT).
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             Craniata;
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P80409;
01-NOV-1995
01-NOV-1995
15-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Trametes versicolor ligninase: isozyme sequence homology and substrate specificity.";
FEBS Lett. 247:143-146(1989).
-I- CATALYTIC ACTIVITY: DEPOLYMERIZATION OF LIGNIN. CATALYSES THE CALPHA)-C(BETA) CLEAVAGE OF THE PROPYL SIDE CHAINS OF LIGNIN.
-I- PATHMAY: FIRST STEP IN LIGNIN DEGRADATION.
-I- SIMILARITY: BELONGS TO THE PEROXIDASE FAMILY. LIGNINASE SUBFAMPIR; SO4013; S04013.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1991
01-FEB-1991
01-OCT-2000
                       METALNIKOWIN IIA.
Palomena prasina.
    Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PS00435; PEROXIDASE_1; PARTIAL.
PROSITE; PS00436; PEROXIDASE_2; PARTIAL.
Oxidoreductase; Peroxidase; Heme; Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lignin degradation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Trametes versicolor (White-rot fungus).
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01-FEB-1991 (Rel. 17, Last sequence update)
01-CCT-2000 (Rel. 40, Last annotation update)
LIGNINASE A (EC 1.11.1.-) (LIGNIN PEROXIDASE)
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PROSITE; P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Joensson L., Karlsson O.,
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      Metazoa;
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nilarity 75.0%;
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  Arthropoda;
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1; Mismatches
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l; Mismatches
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Tracheata; Hexapoda; Insecta;
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P80733;
01-NOV-1997 (Rel. 35, 0
01-NOV-1997 (Rel. 35, 1
01-NOV-1997 (Rel. 35, 1
SUPEROXIDE DISMUTASE ()
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Palomena prasina. Identification of a unique fam. peptides and of a novel insect defensin.";
J. Insect Physiol. 42:81-89(1996).
-i- FUNCTION: ANTIBACTERIAL PEPTIDE ACTIVE BACTERIA.
                                                                                             Oxidoreductase; Manganese
NON_TER 15 15
SEQUENCE 15 AA; 1685 My
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                                                                                                                                                                                                                                                                                                                              Streptomyces griseus. Bacteria; Firmicutes;
                                                                                                                                                                                               Arch. Biochem. Biophys. 334:341-348(1996).

-!- FUNCTION: DESTROYS RADICALS WHICH ARE NORMALLY
CELLS AND ARE TOXIC TO BIOLOGICAL SYSTEMS.

-!- CATALYTIC ACTIVITY: 2 PEROXIDE RADICAL + 2 H(+
                                                                                                                                                                                                                                "Unique isozymes of superoxide dismutase in Streptomyces griseus.";
Arch. Biochem. Biophys. 334:341-348(1996).
                                                                                                                                                                                                                                                       Youn H.-D.,
Kang S.-O.;
                                                                                                                                                                                                                                                                           MEDLINE;
                                                                                                                                                                                                                                                                                                                     Actinomycetales;
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                                                                                                                                                                             -!- SUBUNIT: TETRAMER (POTENTIAL)
                                                                                                                                                                                                                                                                                      STRAIN=KCTC
                                                                                                                                                                                                                                                                                                SEQUENCE
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                                                                                                                                                INTERPRO; IPR001189;
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                      4 TFRFPRP
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                                                                                                                                                                     FAMILY
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TYTLPEP
                                                                                                                           PF00081; sodfe; 1.
TE; PS00088; SOD_MN;
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                                                                                             1685 MW;
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Last
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(EC 1.15.1.1) (FRAGMENT).
                                                                                                                            PARTIAL
                                                                                                                                                                               THE IRON/MANGANESE
                                       Score 21; DB
Pred. No. 1.2e
1; Mismatches
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Pred. No.
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                                                  DB 1;
1.2e+03;
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e hemipteran insect
e family of proline-r
                                                                                             CRC64;
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PHONOR PROPERTY OF THE STREET 
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PHSL_DESBN
P13066;
01-JAN-1990 (
01-JAN-1990 (
15-DEC-1998 (
PERIPLASMIC (
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Blni L., Santucci A., Magi
Comanducci M., Christianen
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01-JAN-1990 (Rel. 13, Last sequence update)
15-DIEC-1998 (Rel. 37, Last annotation update)
PERIPLASMIC [NIFESE] HYDROGENASE LARGE SUBUNIT
HYDROGENLYASE LARGE CHAIN) (FRAGMENT).
Desulfovibrio baculatus (strain Norway 4).
Bacteria; Proteobacteria; delta subdivision; De
                                                                                                                  01-OCT-1994 (Rel. 30, Created)
01-OCT-1994 (Rel. 30, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation updat
UNKNOWN PROTEIN FROM 2D-PAGE FROM ELEMENTAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 88106446.

Prickril B.C., He S.H., Li C., Menon N., Choi E.S., Prickril B.C., Le Gal Dervartantan D.V., Peck H.D. Jr., Fauque G., le Gal Moura I., Moura J.J.G., Patli D., Huynh B.H.;

"Identification of three classes of hydrogenase in
                                                                                                                                                                                                                                                                              Chlamydia
                                                                                                                                                                                                                                                                                                                                                                     UXA6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00507; NI_HGENASE_L_1; PARTIAL.
PROSITE; PS00508; NI_HGENASE_L_2; PARTIAL.
Ox1doreductase; Periplasmic; Nickel; Selenium;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Blochem. Blophys. Res. Commun.
-!- CATALYTIC ACTIVITY: 2 REDUC
                                                                                                                                                                            Pallini V.;
                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                Bacteria;
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INTERPRO; IPR001501
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COFACTOR: ONE NICKEL
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   VTFRFPRPDG
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                              l Similarity
3; Conserv
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3; Conserv
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Chlamydiales; Chlamydiaceae; Chlamydia
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                              Score 22; DB
Pred. No. 5.26
4; Mismatches
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Pred. No. 7.1e
4; Mismatches
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Birkelund
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CED FERREDOXIN + 2
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7.1e+02;
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5.2e+02;
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Vtretou E., Ratt
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L J., Teixeira
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P14471;
01-JAN-1990
01-JAN-1990
01-JAN-1990
01-JAN-1990
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3_HORSE
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P08613;
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[2]
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   <del>:</del>
                                                                                                                SPECIES-E. ASINUS;
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"New tachykinins,
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AGGREGATION .
SUBUNIT: HEX
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 HEXAMER
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Query Match
Best Local Similarity /J...
Thes 3; Conservative
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Biomed. Res. 2:613-617(1981).
-i- FUNCTION: TACHYZININS ARE ACTIVE PEPTIDES WHICH EXCITE NEURONS,
-i- EVOKE BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND
SECRETAGOGUES, AND CONTRACT (DIRECTLY OR INDIRECTLY) MANY SMOOT
                                                       Blomback B., Blomback M., Grondahl N.J., Ho
"Structure of fibrinopeptides its relation
phylogeny and classification of species.";
Ark. Kemi 25:411-428(1966).
                                                                                                                                                                                                     SPECIES-HORSE;
Blomback M., Grondahl N.J.;
"Studies on fibrinopeptides from mammals.";
Acta Chem. Scand. 19:1789-1791(1965).
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01-AUG-1988 (Rel. 08, Last sequence update)
30-ANG-1900 (Rel. 39, Last annotation update)
30-ANG-2000 (Rel. 39, Last annotation update)
HYLAMBATES KASSININ (GLU(2)-PRO(5) KASSININ).
Kassina maculata (African rhacophorid frog) (Hylambates maculatus).
Eukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Hyperoliidae;
                                                                                                                                                                                                                                                                                                                                                 Equus caballus (Horse), and Equus asinus (Donkey).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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SIMILARITY: BELONGS TO THE TACHYKININ FAMILY.
                                       POLYMERIZE INTO FIBRIN
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0 (Rel. 13, Last of
0 (Rel. 13, Last of
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nins, Glu2, P
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75.0%;
CONTAINING
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Pro5-kassinin (hylambates-kassinin) and
of the African rhacophorid frog Hylambates
                                     AS A
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Pred. No. 6.3e+02;
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ACTING
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                                     FUNCTION: YIELDING AS A COFACTOR IN PI
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RT "Isolation and characterization of a laminin-binding protein from rat rate and chick muscle.";

RT and chick muscle.";

Cell Biol 107:687-697(1988).

C C-I- FUNCTION: CALSEQUESTRIN IS A HIGH-CAPACITY, MODERATE AFFINITY,

CC CIACCIUM-BINDING PROTEIN AND THUS ACTS AS AN INTERNAL CALCIUM STORE IN MUSCLE. THE RELEASE OF CALCIUM BOUND TO CALSEQUESTRIN THROUGH ACT OF CALCIUM RELEASE OF CALCIUM BOUND TO CALSEQUESTRIN OCCURS IN THE CALCIUM ALSO BINDS LAMININ.

C A CALCIUM RELEASE CHANNEL TRIGGERS MUSCLE CONTRACTION. BINDS 40

C TO 50 MOLES OF CALCIUM. ALSO BINDS LAMININ.

C -I- SUBCELLULAR LOCATION: THIS ISSOFORM OF CALSEQUESTRIN OCCURS IN THE SARCOPLASMIC RETICULUM'S TERMINAL CISTERNAE LUMINAL SPACES OF FAST SKELETAL MUSCLE CELLS. ASPARTACTIN IS FOUND IN THE BASAL CLAMINA SURREQUESTRING INDIVIDUAL MUSCLE FIBERS.

C -I- TISSUE SPECIFICITY: SKELETAL AND HEART MUSCLE.

C -I- SIMILARITY: BELONGS TO THE CALSEQUESTRIN FAMILY.
                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches S
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                                                                                                           CEP1_ACHFU STANDARD; PRT; 11 AA. P22790; P22790; O1-AUG-1991 (Rel. 19, Created) O1-AUG-1991 (Rel. 19, Last sequence update) O1-DEC-1992 (Rel. 24, Last annotation update) CARDIO-EXCITATORY PEPTIDE-1 (ACEP-1).
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SEQUENCE
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01-FEB-1991 (Rel. 17, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
CALSEQUESTRIN, SKELETAL MUSCLE ISOFORM (ASPARTACTIN)
 STRAIN=FERUSSAC;
MEDLINE; 90211261
Fujimoto K., Ohta
                                                                       Achatina fulica (Giant African snail).
Eukaryota; Metazoa; Mollusca; Gastropoda; Pulmonata;
Achatinacea; Achatinidae; Achatina.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAQS_RAT
                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                        Muscle;
                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS00864; CALSEQUESTRIN_2; PARTIAL PROSITE; PS00863; CALSEQUESTRIN_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INTERPRO; IPRO01393;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P19633
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A31049; A31049.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DGSDAVGGEF
                                                                                                                                                                                                                                                               FPEYDGVDRV 15
                                                                                                                                                                                                                                                                                           FPRPDGREAV 16
                                                                                                                                                                                                                                                                                                                                                                                                         Glycoprotein;
                                                                                                                                                                                                                                                                                                                      Similarity
5; Conserv
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5; Conservative
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                                                                                                                                                                                                                                                                                                                      Conservative
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                               TISSUE-HEART
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  Yoshida M., Kubota
                                                                                                                                                                                                                                                                                                                                    . 98;
                                                                                                                                                                                                                                                                                                                                                                                              WW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 4.9e+02;
1; Mismatches 4;
                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                     Score 24; DB 1;
Pred. No. 5.1e+02;
1; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                            92ADE04FC2A69280 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Sciurognathi; Muridae.
                             ATRIUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Muridae;
  Muneoka
                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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Υ.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (LAMININ-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Murinae;
                                                                                      Stylommatophora;
  Kobayashi M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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Best Local Similarity 80.
Matches 4; Conservative
                                        Matches
                                                  Query Match
Best Local
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15-JUL-1998
30-MAY-2000
                                                                                             UNSURE
UNSURE
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hormone;
MOD_RES
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P99504;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          _CANFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "A novel cardio-excitatory peptide isolated from the African giant snail, Achatina fulica."; Biochem. Biophys. Res. Commun. 167:777-783(1990).
-i- FUNCTION: POTENTIATES THE BEAT OF THE VENTRICLE, EXCITATORY ACTIONS ON THE PENIS RETRACTOR MUSCLE, MUSCLE AND THE IDENTIFIED NEURONS CONTROLLING THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Biochem. Bioph
                                                                                                                                                                                                                                                                                            dog heart proteins.";
Electrophoresis 18:2795-2802(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                            ATP
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                                                                                                                                                                                                                                                                                                                                                 TISSUE=HEART
                                                                                                                                                                                                                                                                                                                                                                                  Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                     Canis familiaris (Dog).
                                                                                                                                                                                                                                                                                                                                                                                                                ATP5B
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                                                                                                                                                                                                                                                                                                                                       MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa;
                                                                                                                                        Mitochondrion.
                                                                                                                                                 ATP synthesis;
                                                                                                                                                               PROSITE;
                                                                                                                                                                          ENTERPRO;
                                                                                                                                                                                 HSC-2DPAGE; P99504; DOG.
                                                                                                                                                                                                                                                                                                                  "HSC-2DPAGE and the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9 RPDGR 13
                                                                                                                                                                                            SUBUNITS: ALPHA(3), BETA(3), GAMMA(1), DELTA(
HAS THREE MAIN SUBUNITS: A, B AND C.
SUBCELLULAR LOCATION: MITOCHONDRIAL.
SIMILARITY: BELONGS TO THE ATPASE ALPHA/BETA
                                                                                                                                                                                                                                 SUBUNIT: F-TYPE ATPASES HAVE 2 COMPONENTS, CF(1) - THE CATALYTIC CORE - AND CF(0) - THE MEMBRANE PROTON CHANNEL. CF(1) HAS FIVE CORE - AND CF(0) - THE MEMBRANE PROTON CHANNEL. CF(1) HAS FIVE CORE.
                                                                                                                                                                                                                                                                                                                                                                                                                        JUL-1998 (Rel. 36, Created)
JUL-1998 (Rel. 36, Last sequence update)
JUL-2000 (Rel. 39, Last annotation update)
_SYNTHASE BETA CHAIN, MITOCHONDRIAL (EC 3.6.1.34) (FRAGMENT).
                                                                                                                                                                                                                                                                       FUNCTION: PRODUCES ATP FROM ADP IN THE GRADIENT ACROSS THE MEMBRANE. THE BETA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY: TO POSSIBLE PEPTIDE L5
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PSPKGAAAXXXR 17
                   PRPDGREAVAYR
                                        Similarity 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Amidation.
                                                                                                                                                   PS00152; ATPASE_ALPHA_BETA;
hesis; CF(1); Hydrogen ion tr
                                                                                                                                                                                                                                                                                                                                       98163340.
                                                                                                                                                                       IPR000194;
                                                                                                                                                                                                                                                                                                                                                                                 Eutheria; Carnivora;
                                                                                                                                                                                                                                                                                                                             Corbett J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11 AA;
                                                                                           8
17
19
3 AA;
                                                                                               19
                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
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1305
                                                                                             8
19
19
1871
                                                                                                                                                                                                                                                                                                                  two-dimensional gel
                                                                                                                                                                                                                                                                                                                                                                                Chordata; Craniata; Vertebrata;
Carnivora; Fissipedia; Canidae;
                                                    21
41
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                                                   .98;
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                                                                                              WW;
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                                       Score 23; DB Pred. No. 7.1e 0; Mismatches
                                        0;
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AMIDATION.
82D6D5B9C7741365
                                                                                              BB9C163FDC60BB42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ore 23; DB
red. No. 3.9e
Mismatches
                                                                                                                                                  transport;
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                                                                                                                                                                                                                                                                                                                  electrophoresis
                                                    .1e+02
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                                                                                                                                                                                                                                                                       CHAIN IS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1;
                                                                                                                                                                                                                             DELTA(1),
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                                                                                             CRC64;
                                                                                                                                                  Hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 11
                                                            Length 19
                                                                                                                                                                                              CHAINS
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                                        Indels
                                                                                                                                                                                                                                                                       OF A
                                                                                                                                                                                                                                                                                                                                                                                 Canis
                                                                                                                                                                                                                                                                                                                                                                                           Euteleostomi;
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                                                                                                                                                                                                                             EPSILON(1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BUCCAL MUSCLE
                                                                                                                                                                                                                                                                       A PROTON
CATALYTIC
                                                                                                                                                                                              FAMILY
                                                                                                                                                                                                                                                                                                                  database
                                                                                                                                                  ATP-binding;
                                        0;
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RESULT

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FIBA_BUBAR
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                                                 Query Match
Best Local S
Matches 5
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Best Local S
Matches 5
                                                                                                               HSSP; P02
Blood coa
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                    STRAIN=110....
MEDLINE: 76040091.
Balestrieri C., Colonna G., Irace G.;
Balestrieri C., Colonna G., Irace G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDITINE: 96321313.

Shishikura F., Abe T., Ohtake S.-I., Tanaka K.;

Shishikura F., Abe T., Ohtake S.-I., Tanaka K.;

*Purification and characterization of a 58,000-Da proteinase

*Purification and characterization of a solitary ascidian, Halocynthia
                                                                                                                                                                                                                                                                                                                                                                                                     Bubalus arnee bubalis (Domestic water buffalo).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence up
01-JAN-1990 (Rel. 13, Last annotation
FIBRINOPEPTIDE A.
                                                                                                                                                                                                                                                       Biochim. Biophys. Acta 405:517-521(1975).
-I- FUNCTION: FIBRINOGEN HAS A DOUBLE FUNCTION: YIELDING POLYMERIZE INTO FIBRIN AND ACTING AS A COFACTOR IN PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FIBA_BUBAR
P14443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMP. BLOCHEM. Physiol. 114B:1-9
-I- FUNCTION: STRONGLY INHIBITS
-I- SUBUNIT: MONOMER.
-I- SIMILARITY: BELONGS TO THE 9
                                                                                                                                                                                                                                                                                                                                                                                            Bovidae; Bovinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Serpin; Serine protease inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INTERPRO; IPRO00215; -. PROSITE; PS00284; SERPIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   roretzi.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-HEMOLYMPH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Halocynthia roretzi (Sea squirt).
Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea;
                        11 DGREAVAYRF
N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                          SUBUNIT: HEXAMER CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS (ALPHA, BETA, & GAMMA), LINKED TO EACH OTHER BY DISULFIDE BONDS. MISCELLANBOUS: CONVERSION OF FIBRINGGEN TO FIBRIN IS TRIGGERED BY THROMBIN, WHICH CLEAVES FIBRINOPEPTIDES A AND B FROM ALPHA, & BETA CHAINS, AND THUS EXPOSES THE N-TERMINAL POLYMERIZATION SITES
                                                                                                                                                     RESPONSIBLE FOR THE FORMATION OF THE SOFT CLOT
, P02671; 1BBR.
                                                                                                                                                                                                                                                  AGGREGATION.
DGSDAVSGEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KKDGEEKVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RPDGREAVA
                                                                                                                                         coagulation;
                                                 5,
                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 AA; 1104 MW; 4225C73B1B187AA3 CRC64;
                                                                                                                19 AA;
                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10
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                        20
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                                                                                                                                         Plasma.
                                                                                                                1852 MW;
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50
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INHIBITS TRYPSIN AND PLASMA ENZYME(S)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Halocynthia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 25; DB Pred. No. 1.7e
1; Mismatches
                                             Score 25; DB Pred. No. 3.3e 2; Mismatches
                                                                                                                9BA41F0F55A54CC5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SERPIN FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein; Plasma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       update)
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1.7e+02;
                                                                        DB 1;
                                                             .3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A
                                                                        Length 19
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                                                                                                                                                                                                                                                          IN PLATELET
                                                                                                                                                                                                                                                                                                             breeding
                                                                                                                                                                                                                                                                        MONOMERS
                                                                                                                                                                                                                                                                                                                                                                                                      Bovoidea;
                                                0,
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RESULT 5
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Best Local Similarity
Matches 4; Conser
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P29399;
01-DEC-1992
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P14442;
01-JAN-1990 (
01-JAN-1990 (
01-JAN-1990 (
NON_TER
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ACT_SITE
SEQUENCE
                                           HSSP;
Blood
                                                               -!- SUBUNIT: HEXAMER CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS (ALPHA, BETA, 6 GAMMA), LINKED TO EACH OTHER BY DISULFIDE BG -!- MISCELLANEOUS: CONVERSION OF FIBRINGGEN TO FIBRIN TRIGGER THROMBIN, WHICH CLEAVES FIBRINOPEPTIDES A AND B FROM ALPHA 6 CHAINS, AND THUS EXPOSES THE N-TERMINAL POLYMERIZATION SITES RESPONSIBLE FOR THE FORMATION OF THE SOFT CLOT.
                                                                                                                                                                                                                                       MITOSS G.A., Doolittle R.F.; "Amino acid sequence studies on artiodacty fibrinopeptides."; Arch. Biochem. Biophys. 122:674-684(1967).

-!- FUNCTION: FIBRINGGEN HAS A DOUBLE FUNCTION: YIELDING MOND POLYMERIZE: INTO FIBRIN AND ACTING AS A COFACTOR IN PLATEL
                                                                                                                                                                                                                                                                                                                                                                                                 Bovidae; Bovinae; [1]
                                                                                                                                                                                                                                                                                                                                                                                                                  Bubalus bubalis (Water buffalo).
Eukaryota; Metazoa; Chordata; Craniat
Mammalia; Eutheria; Cetartiodactyla;
Bovidae; Bovinae; Bubalus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOD_RES
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J. Biochem. 110.856-858(1991).
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SODM_STRGR
MX3A_PALPR
GALS_SALTY
MIF_PIG
MFP1BOTJA
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BPP2_BOTJA
ECDE_LYMDII
MK2B_PALPR
YALA_TRYBH
UPORC_METTM
UPF2_ECOLI
MK2B_PALPR
YALA_TRYBH
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P19633 rattus norv
P22790 achatina fu
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NDARD; 34, Create 34, Last s 37, Last a	24.8 50.0 tive	STANDARD; PR 1. 26, Created) 1. 26, Last seque 1. 38, Last annot SUBCOMPONENT, A C SUBCOMPONENT, A C ria; Rodentia; Cr ria; Rodentia; Sc 57. Bridgman 1y D.J., Bridgman 1 and biochemical 10:433-440(1993). 10 ASSOCIATES WIT ST COMPONENT OF T KE REGIONS OF C10 ON INTERACTION OF NIME SUBUNITS, SC NIME SUBUNITS, SC HE A AND B CHAINS RAT, UNLIKE HUM 1073; -UNLIKE HUM 1173; -UNLIKE HUM 1173; -UNLIKE HUM 1173; -UNLIKE HUM 1173; -LARTIAL 15 15 16 17 17 18 18 18 18 18 18 18 18	
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10 AA. update) on update) NT).	6; DB 1; Length 15 5. 1.8e+02; atches 1; Indels	AA. AA. te) date) AGMENT). AGMENT). AGMENT). arrison R.A.; erization of erization of COMPINES CIR COMPLEMENT OF THE CIR THE CA EFFICIENT ACT OBULAR HEADS ESENT IN HAMO RIMOLECULAR CO THE CIQ SUBCO ICH ARE DISUL REE OF WHICH LITION TO THE CONTAINED MIN	
	· ·	dae; Euteleostomi; dae; Murinae; Ratt R.A.; R.A.; n of rat C1 and C1 C1R AND C1S TO YI ENT SYSTEM. THE ENT SYSTEM. THE HE CA(2+) - DEPENDEN THE CACTIVATION OF C1 EADS OF C1Q WITH T A IMMUNE COMPLEX OF C1Q SUBCOMPONENT IS DISULFIDE - LINKED DISULFIDE - LINKED DISULFIDE - LINKED OTHE MAJOR A:B AND ED MINOR DIMER SPEC DO MINOR DIMER SPEC ED MINOR DIMER SPEC S-4 IN B CHAIN).	P30424 P01021 P11496 P19850 P28499 P22688 P22688 P41333 P20012 P41589 P01198
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glucan 1.4-alpha-glucosidase (EC 3.2.1.3) - Bacillus stearothermophilus (fragment) N;Alternate names: exo-alpha-1-4-glucosidase I C:Species: Bacillus stearothermophilus C:Date: 22-Nov-1993 #sequence_revision 01-Nov-1996 #text_change 21-Aug-1998 C:Accession: S21202 R:Suzuki Y: Yonezawa, K.: Hattori, M.: Takii, Y. Eur. J. Blochem. 205, 249-256, 1992 R:Suzuki Y: Yonezawa K: Hattori, M.: Takii, Y: Eur. J. Blochem. 205, 249-256, 1992 N:Title: Assignment of Bacillus thermoamyloliquefaciens KP1071 alpha-glucosidase I to nce and in structural parameters calculated from the amino acid composition. A:Reference number: S21202; MUID:92209510 A:Accession: S21202
A:Experimental source: ATCC 12016
C:Superfamily: alpha-glucosidase; alpha-amylase core homology
C:Keywords: glycosidase; hydrolase; polysaccharide degradation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Experimental source: strain KP1071
C; Superfamily: alpha-glucosidase; alpha-amylase core homology
C; Keywords: glycosidase; hydrolase
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Eur. J. Blochem. 205, 249-256, 1992
A;Title: Assignment of Bacillus thermoamyloliquefaciens KP1071 alpha-glucosidase noce and in structural parameters calculated from the amino acid composition.
A;Reference number: S21202; MUID:92209510
A;Accession: S21241
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A;Title: A novel cardio-excitatory peptide isolated from the atria of the African giant A;Reference number: A34662; MUID:90211261
A;Accession: A34662
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                                                                                              A; Molecule type: protein A; Residues: 1-15 <SUZ>
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A;Residues: 1-11 <FUJ>
C;Keywords: amidated carboxyl end
F;11/Modified site: amidated carboxyl end (Phe) #status experimental
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A:Residues: 1-15 <SUZ>
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Pred. No. 7.8e+02;
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Pred. No. 1.1e+03;
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Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps
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2S albumin small chain 1 nIV - rape (fragments)
(;Species: Brassica napus (rape)
(;Date: 19-Mar-1997 #sequence_revision 13-Mar-1998 #text_change 13-Mar-1998
(;Accession: S09722
R;Monsalve, R.I.; Menendez-Arias, L.; Lopez-Otin, C.; Rodriguez, R.
FEBS Lett. 263, 209-212, 1990
A;Title: beta-Turns as structural motifs for the proteolytic processing of seed
A;Reference number: S09720; MUID:90242974
A;Accession: S09722
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S09722
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                                                                                                                                                                  A; Residues: 1-9
A; Experimental
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A;Residues: 1-15 <MUL>
C;Keywords: carbon-carbon lyase; carboxy-lyase; chloroplast
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A;Accession: A28965
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Reference number: PA0001
A; Accession: PA0003
A; Molecule type: protein
A; Residues: 1-15 < KAM>
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Pred. No. 7.4e+02;
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C;Accession: A58839
R;To, K.Y.; Suen, D.F.; Chen, L.F.O.; Chen, S.C.G.
submitted to the Protein Sequence Database, June 1998
A;Description: Characterization of rice leaf cDNA encoding rubisco activase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: protein
A; Residues: 'XE', 3-12 <VO3>
A; Residues: 'XE', 3-12 <VO3>
C; Comment: Calsequestrin is a high-capacity and moderate-affinity calcium binding pro C; Comment: Calsequestrin acts as a calcium buffer, and the release of calcium bound t C; Comment: The fast skeletal muscle isoform of calsequestrin can be phosphorylated in C; Superfamily: calsequestrin
C; Keywords: calcium binding; glycoprotein; skeletal muscle
                                                                                                                                                                                                  A;Molecule type: protein
A;Residues: 1-15 <TOK>
A;Residues: 1-15 <TOK>
A;Residues: 1-15 <TOK>
A;Residues: 1-16 <TOK>
A;Residues: 1-16 <TOK>
A;Residues: 1-16 <TOK
A;Rote: RUBISCO activase I has an additional 33
                                                                                                                                                                                                                                                                                                          A; Reference number: A; Accession: A58839
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                                                                                                                                                                                  C; Keywords:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Species: Oryza sativa (rice)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ribulose-bisphosphate carboxylase activase I - rice (fragment) N/Alternate names: RUBISCO activase I, 44 \, \mathrm{K}
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A; Residues: 'XXX', 4-10, 'X', 12
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B; Title: Calsequestrin is a component of smooth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Hall, D.E.; Frazer, K.A.; Hann, B.C.; Reichardt, L.F.
J. Cell Biol. 107, 687-697, 1988
A;Title: Isolation and characterization of a laminin-binding protein from A;Reference number: A92751; MUID:88331073
A;Accession: A31049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    calsequestrin, fast skeletal muscle - rat (fragment)
N,Alternate names: 58K dihydropyridine-binding protein; aspartactin; calmitine;
C;Species: Rattus norvegicus (Norway rat)
C;Date: 01-Dec-1989 #sequence_revision 01-Dec-1989 #text_change 16-Jul-1999
C;Recession: A31049; S46193; S46194; S46195
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Best Local
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5; Conserv
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                                                                          22.4%;
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50.0%;
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                                               Score 23.5; DB 2;
Pred. No. 8.9e+02;
1; Mismatches 4;
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Pred. No. 1e+03;
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FQAPTGDGTHEAV 13

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collagen alpha 5(IV) chain - bovine (fragment)
C;SpecLes: Bos primigenius taurus (cattle)
C;SpecLes: Bos primigenius taurus (cattle)
C;Date: 03-Apr-1992 #sequence_revision 03-Apr-1992 #text_change 19-Oct-1995
C;Accession: E39419
R;Gunwar; S; Ballester, F; Kalluri, R; Timoneda, J.; Chonko, A.M.; Edwards, J. Biol. Chem. 266, 15318-15324, 1991
A;Title: Glomerular basement membrane. Identification of dimeric subunits of th A;Reference number: A39419; MUID:91332055
A;Roccession: E39419
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-20 <GUN>
C;Superfamily: collagen alpha 1(IV) chain
C;Keywords: coiled coil; extracellular matrix; glycoprotein; trimer; triple hel
                                                                                                                   A;Title: beta-Turns as structural motifs for A;Reference number: S09720; MUID:90242974 A;Accession: S09721
                                                                                                                                                                                                                               2S albumin small chain nIII - rape (fragments)
C:Species: Brassica napus (rape)
C:Date: 19-Mar-1997 #sequence_revision 13-Mar-1998 #text_change 13-Mar-1998
C:Accession: S09721
C:Accession: S09721
R:Monsalve, R.I.; Menendez-Arias, L.; Lopez-Otin, C.; Rodriguez, R.
FEBS Lett. 263, 209-212, 1990
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C;Date: 21-Aug-1998 #sequence_revision 21-Aug-1998 #text_change 21-Aug-1998
C;Accession: PT0091
R;Kawakami, T.; Uchida, T.; Sakai, T.; Kamo, M.; Morimasa, T.; Tsugita, A. submitted to JIPID, July 1998
A;Description: Proteome analysis of mouse brain.
A;Reference number: PT0091
A;Accession: PT0091
A;Accession: PT0091
A;Roccession: PT0091
A;Roccession: DT0091

A; Molecule type: protein
A; Residues: 1-9;10-14 <MON>
A; Experimental source: seed
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S09721
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Pred. No. 3.4e+02;
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Pred. No. 4.6e+02;
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C;Genecase
A;Gene: GDB:RHO
A;Cross-references: GDB:120347
A;Crosstion: 3q21.3-3q24
nucleoside-diphosphate kinase (EC 2.7.4.6) - Arabidopsis thaliana (fragment) C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 18-Nov-1994 #sequence_revision 06-Jan-1995 #text_change 15-Mar-1996 C;Accession: PA0003
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C;Species: Bos primigenius taurus (cattle)
C;Date: 04-Dec-1997 #sequence_revision 12-Dec-1997 #text_change 12-Dec-1997
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C;Keywords: mitochondrion; NAD
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A; Residues: 1-7;8-12 <ZH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Title: Identification and purification of a bovine liver mitochondrial NAD(+)-glyco A; Reference number: S68402; MUID:96140583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R; Zhang, J.; Ziegler, M.; Schneider, R.; Klocker, H.; Auer, B.; Schweiger, M. FEBS Lett. 377, 530-534, 1995
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A; Residues: 1-19 < HOR>
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Hum. Genet. 90, 255-257, 1992
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C;Date: 02-Jul-1996 #sequence_revision 08-Nov-1996
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Pred. No. 6.4e+02;
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Pred. No. 4.6e+02;
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Pred. No. 5.
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5.8e+02;
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Maximum Match
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 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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December 21, 2000, 08:30:01; Search time 112.59 Seconds (without alignments) 11.273 Million cell updates/sec
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Copyright (c) 1993 - 2000 Compugen
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collagen alpha 1(I	2 D56979		.0			42
substance P-like p	2 E60409		.0			41
kassinin-like pept	2 C60409		.0			40
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angiotensin-conver	1 XAVI6B		.0			38
growth hormone rec	2 146023		.0			37
macrophage chemota	2 A37027		.0			36
cardioacceleratory	2 S66646					35
capsid protein VP2	2 PQ0548					34
ribosomal protein	2 A34835					33
gallbladder stone	2 F57789	is.	20.0 1			32
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amylopullulanase -	2 S60353	4	20.0 1			30

glutathione transferase (EC 2.5.1.18) MII - mouse (fragment) C;Species: Mus musculus (house mouse) C;Date: 25-Oct-1987 #sequence_revision 25-Oct-1987 #text_change 30-Sep-1993 C;Accession: C37520; N24735 R;Mannervik, B.; Alin, P.; Guthenberg, C.; Jensson, H.; Tahir, M.K.; Warholm, M.; Jor Proc. Natl. Acad. Sci. U.S.A. 82, 7202-7206, 1985 A;Title: Identification of three classes of cytosolic glutathione transferase common A;Reference number: A24735; MUID:86042634 A;Accession: C37520 RESULT C37520 R:Koiwai, O.; Kaneda, T.; Morishita, R. Biochem. Biophys. Res. Commun. 144, 185-190, 1987 A;Title: Analysis of human terminal deoxynucleotidyl transferase cDNA expressible in A;Reference number: I45884; MUID:87213162 A;Accession: I84603 deoxynucleotidyltransferase - human (fragment) c;Speciles: Homo sapiens (man) C;Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 29-Aug-1997 C;Accession: 184603 A:Molecule type: protein A;Residues: 1-17 <MAN> C;Superfamily: glutathione C;Keywords: transferase A;Gene: GDB:DNTT A;Cross-references: GDB:119100; OMIM:187410 A;Map position: 10q23-10q24 A;Molecule type: mRNA A;Residues: 1-13 <RES> A;Cross-references: GB:M26144; NID:g951194; PID:g951195 밁 γ A; Status: preliminary; translated from GB/EMBL/DDBJ 184603 Matches Query Match Best Local Similarity w 9 RPDGRE 14 N QPDGRQ 4; Conservative 25.7%; transferase 2 Score 27; Pred. No. Mismatches DB 2; 2e+02; 0,: Length 13; 0; Gaps 0;

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Matches Query Match Best Local :

Local Similarity nes 6; Conserv

Conservative

25.7%;

Score 27; Pred. No. Mismatches

DB 2; Len, . 2.6e+02; . 2.3

Length 17;

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RESULT 14
5196404 4
; Patent No. 5196404
; Patent No. 5196404
; APPLICANT: MARAGANORE, JOHN M.; FENTON II, JOHN M.; KLINE, TONI
; APPLICAT FOR INVENTION: INHIBITORS OF THROMBIN
NUMBER OF SEQUENCES: 18
; CUGRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/549,388
; FILING DATE: 06-JUL-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 395,482
; FILING DATE: 18-AUG-1989
; SEQ ID NO:4;
; LENGTH: 20
5196404-4
                                                                                                                                                                                                                               TITLE OF INVENTION: INHIBITORS OF THROMBIN NUMBER OF SEQUENCES: 8
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/924,549
FILING DATE: 31-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 652,929
FILING DATE: 08-FEB-1991
APPLICATION NUMBER: 549,388
FILING DATE: 08-FUB-1991
APPLICATION NUMBER: 395,482
FILING DATE: 18-AUG-1989
SEQ ID NO:1:
LENGTH: 20
5425936-1
Search completed: December 21, 2000, 08:31:45 Job time: 368 sec
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5425936-1
;Patent No. 5425936
; APPLICANT: MARAGANORE, JOHN M.;JABLONSKI, JO-ANN M.;BOURDON,
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Matches 5; Conservative
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Best Local Similarity 83.3
Matches 5; Conservative
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83.3%;
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RESULT 12
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APPLICANT: Dean,
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TELEX: 910-221-5317
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: F1Dppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,551
APPLICATION NUMBER: US 0: FILING DATE: 08-FEB-1991
ATTORNEY, AGENT INFORMATION:
NAME: MCDONNell, John J
REGISTRATION NUMBER: 26,9
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TELEPHONE: 312 715 1000
TELEFAX: 312 715 1234
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NAME: NO. 5788960nan, Kevin
REGISTRATION:
RE
                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/264,176
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CORRESPONDENCE ADDRESS:
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LENGTH: 20 amino acids
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STATE: Illinoi:
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COTHER INFORMATION: /label= D-Phe
OTHER INFORMATION: /note= "The amino terminal phenylalanine residue
OTHER INFORMATION: is in the D stereochemical configuration"
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SOFTWARE: Patentin Policy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 90,1104-V
                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
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10 South Wacker Drive Suite 3000
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; LOCATION: 1
; OTHER INFORMATION:
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US-08-480-551-29
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Best Local Similarity
Thes 5; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCT-US91-09108-18
                                                                                           PCT-US91-09108-18
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312 715 1000
TELEFAX: 312 715 1234
TELEX: 910-221-5317
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18, Application PC/TUS9109108 GENERAL INFORMATION:
Best Local Similarity Matches 5; Conserv
                                                                                                                                                                                            TELEFAX: (212) 715-06;
TELEX: 14-8367
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: Haley Jr., James F.
REGISTRATION UNMBER: 27,794
REFERENCE/DOCKET NUMBER: B154
TELEOMMUNICATION INFORMATION:
TELEPHONE: (212) 715-0600
TELEFAX: (212) 715-0674
                                                                                                             MOLECULE TYPE:
                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Biogen, Inc.
TITLE OF INVENTION: *\ ' BIFUNCTIONAL INHIBITORS OF THROMBIN ANDPLATELET ACTIVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
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                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: POFILING DATE: 19911205
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 875 Third Avenue - 29th Floor
CITY: New York
STATE: New York
                                                                                                                                TOPOLOGY:
                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
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                                                                                                                                            AMINO ACID
                                                                                                                                                               20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     United States
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                                                                                                                                                                                                                                                                                                                                                                                                                                               PE: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                                                                                                           protein
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                                                                                                                                                                                                                                                                                         28.6%;
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/note= "The amino terminal phenylalanine residue is in the D stereochemical configuration"
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                    Score 30; DB Pred. No. 72;
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Pred. No.
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                                    DB 4; Length 20;
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Conservative

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В
                                             Query Match
Best Local Similarity
Matches 5; Conserva
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                                                                                                                                        US-08-464-456-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 28.0
Best Local Similarity 83.1
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Dean, Richard
TITLE OF INVENTION: Tecl
TITLE OF INVENTION: Tecl
TITLE OF SEQUENCES: 37
CORRESPONDERS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                 TELEX: 910-221-5317
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: NO. 5681541nan, Kevin E
REGISTRATION NUMBER: 35,303
REFERENCE/DOCKET NUMBER: 90,11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                   LOCATION: 1
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: 312 715 1000
TELEFAX: 312 715 1234
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                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/464,456 FILING DATE: 05-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                               NAME/KEY: Modified-site
                                                                                                                                                                                                                                                          TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                      ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
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                               7 FPRPDG 12
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FPRPGG 6
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5681541
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                                                                                                                                                                                                                                                                                   20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Banner & Allegretti, Ltd.
10 South Wacker Drive Suite 3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dean, Richard T
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                                                             Conservative
                                                                                                                                                                                                                                          peptide
                                                                          28.6%;
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Imaging 
: 37
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                                                                                                                                         /label= D-Phe
/note= "The amino terminal phenylalanine residue is in the D stereochemical configuration"
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                                                                        Score 30; DB
Pred. No. 72;
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Pred. No.
                                                            Mismatches
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                                                                                       DB 1; Length 20;
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US-08-286-748B-6
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                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 83...
Thes 5; Conservative
                                                                                                                                                                            Sequence 29, Application US/08463052
Patent No. 5788960
GENERAL INFORMATION:
APPLICANT: Dean, Richard T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 6, Application US/08286748B Patent No. 5759542
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (617) 542-890
TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: J. Peter Fasse
REGISTRATION NUMBER: 32,983
REFERENCE/DOCKET NUMBER: 0454
TELECOMMUNICATION INFORMATION:
TELECHHONE: (617) 542-5070
                                                                                                                                           APPLICANT: Dean, Richard T
TITLE OF INVENTION: Technet:
TITLE OF INVENTION: Imaging
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U.S.A.
2IP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" D1
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
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TITLE OF INVENTION:
                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
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COMPUTER READABLE FORM:
                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                             CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US, FILING DATE: August 5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PS/2 Model 50Z or 55SX OPERATING SYSTEM: MS-DOS (Version 5.0) SOFTMARE: WordPerfect (Version 5.1)
                                 COUNTRY:
                                                                                STREET:
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TOPOLOGY: li
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                                                                                ADDRESSEE: Banner & Allegretti, Ltd. STREET: 10 South Wacker Drive Suite 3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE:
                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
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               60606
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
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                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (617) 542-8906
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPOSITIONS AND METHODS FOR THE DELIVERY OF DRUGS BY PLATELETS FOR THE TREATMENT O
                                                                                                                                                              Technetium-99m Labeled Polypeptides for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Diskette, 1.44 Mb
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Pred. No.
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72;
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Patent No.

GENERAL INFORMATION:

APPLICANT: Maraganore, John M. APPLICANT: Chao, Betty H.

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                                                                                                                                                                                                                                                                                                                                                       US-07-831-780-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Haley Jr., James F.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: B154
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 715-0600
TELEPAC: (212) 715-0674
TELEPAC: (212) 715-0674
TELEPX: 14-8367
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPPY disk

OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.24
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/07/623,611
FILING DATE: 19901207
CLASSIFICATION: 435
ATTORNEY/AGP***
                                                                                                                                                                                                                                                                                                                  Sequence 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Chao, Betty H.
APPLICANT: Strauch, Kathryn L.
APPLICANT: Thompson, Jeffrey S.
TITLE OF INVENTION: BIFUNCTIONAL INHIBITORS OF THROMBIN
TITLE OF INVENTION: PLATELET ACTIVATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
OPERATING SYSTEM: PC-DOS
                                                                                                                                                                           APPLICANT: Dunn, Jeffrey
APPLICANT: Lyle, Leon R
APPLICANT: Rajagopalan, Raghavan
TITLE OF INVENTION: Radiolabelled Peptide Compounds
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSE: Rita D. Vacca
                                                                   COUNTRY: US
ZIP: 63134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 875 Thi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
nes 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: AMINO ACID
                                                                                                                                        STREET: Mallinckrodt Medical, Inc., 675 McDonnell STREET: Blvd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH:
                                                                                                                          CITY: St. Louis
                                                                                                                                                                                                                                                                                                                                                                                                                        1 FPRPGG 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 FPRPDG 12
                                                                                                                                                                                                                                                                                                                    2, Application US/07831780
5. 5371184
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   compatible
PC-DOS/MS-DOS
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83.3%;
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Best Local Similarity
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US-07-831-780-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 8
US-08-058-699-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
GENERAL INFORMATION:
GAPULCANY: Edgar Haber
APPLICANY: Christoph Bode
APPLICANT: Marschall S. Runge
APPLICANT: Marschall S. Runge
APPLICANT: Marschall S. Runge
APPLICANT: Morechall FIBRIN-TARGETED INHIBITORS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 9, Appril-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 314-895-2156
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Vacca, Rita D.
REGISTRATION NUMBER: 33,624
REFERENCE/DOCKET NUMBER: 075.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 314-895-7215
                                                                                                                                 FILING DATE: 19930503
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: N/A
FILING DATE: N/A
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/831,780
FILING DATE: 19920502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: PI
HYPOTHETICAL: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: AMINO ACID
TOTAL
                           TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                          COMPUTER: IBM PS/2 Model 50Z or 55SX OPERATING SYSTEM: MS-DOS (Version 5.0) SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: 314-895-2156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                    NAME: Janis K. Fraser, Ph.D. REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 05433/004001
                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM:
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                                                                                                                                                                                                                           APPLICATION NUMBER: U
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                200154
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 Mismatches

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Pred. No. 72;
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Query Match
Best Local Similarity
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5433940-7
                                    REFERENCE/DOCKET NUMBER: 35,030
REFERENCE/DOCKET NUMBER: 002258-008
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6220
TELEFAX: (703) 836-6221
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
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APPLICANT: MARAGANORE, JOHN M.; FENTON II, JOHN M.; KLINE, TITLE OF INVENTION: INHIBITORS OF THROMBIN
NUMBER OF SEQUENCES: 25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO:7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Applic
Patent No. 5541101
                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/101,041
FILING DATE: 03-AUG-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-206854
FILING DATE: 03-AUG-1992
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/834,259
FILING DATE: 17-AUG-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 548,388
FILING DATE: 06-JUL-1989
APPLICATION UMBER: 395,482
FILING DATE: 18-AUG-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
FEATURE:
                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: ANTI-OXYTOCIN RECEPTOR ANTIBODIES AND TITLE OF INVENTION: METHODS FOR THEIR PRODUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: AZUMA, Chihiro
APPLICANT: KIMURA, Tadashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NPPLICANT: SAJI, Fumitaka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Burns, Doane, Swecker & Mathis STREET: P.O. Box 1404 CITY: Alexandria STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 10
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                peptide
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LOCATION: 1.18
OTHER INFORMATION: /
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US-08-101-041A-4
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5433940-2
US-07-623-611-18
; Sequence 18, Application US/07623611
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Best Local Similarity
"hes 5; Conserv?
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5196404-6
;Patent No. 5196404
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Best Local Similarity
6; Conserve
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                                 RESULT
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APPLICANT: MARAGANORE, JOHN M.; FENTON II, JOHN M.; KLINE, TITLE OF INVENTION: INHIBITORS OF THROMBIN NUMBER OF SEQUENCES: 25

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5196404-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: MARAGANORE, JOHN M.; FENTON II, JOHN M.; KLINE, TONI TITLE OF INVENTION: INHIBITORS OF THROMBIN NUMBER OF SEQUENCES: 18
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/549,388
FILING DATE: 06-TUL-1990
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 395,482
FILING DATE: 18-AUG-1989
SEQ ID NO:6:
                                                                                                                                                                                                                     SEQ ID NO:2:
                                                                                                                        Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: 548,388
FILING DATE: 06-JUL-1989
APPLICATION NUMBER: 395,482
FILING DATE: 18-AUG-1989
                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/834,259 FILING DATE: 17-AUG-1990
                                                                                                                                                                                                         LENGTH: 19
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                                                                                                7 FPRPDG 12
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                                                                        FPRPGG 6
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75.0%;
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oxytocin receptor polypeptide."
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                                                                                                                                      Score 30;
Pred. No.
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Pred. No.
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68;
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US-08-101-041A-4
5196404-6
5433940-2
US-07-623-611-18
US-07-831-780-2
US-08-086-699-9
US-08-08-08-08-099-9
US-08-480-551-29
PCT-US91-09108-18
5196404-4
5425936-1
US-08-1893-526A-17
US-08-18-936-18-96
US-08-19-116-2
US-08-19-173-116-2
US-08-974-775-12
US-08-974-775-12
US-08-622-720A-21
US-08-622-720A-21
US-08-632-720A-21
US-08-632-720A-21
US-08-632-720A-21
US-08-632-720A-21
US-08-632-720A-21
US-08-633-262B-70
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                                            Sequence 6, Appli
Patent No. 5433940
Sequence 4, Appli
Patent No. 5433940
Patent No. 5433940
Sequence 18, Appli
Sequence 2, Appli
Sequence 29, Appli
Sequence 29, Appli
Sequence 29, Appli
Sequence 18, Appli
Sequence 18, Appli
Sequence 17, Appli
Sequence 102, Appli
Sequence 96, Appli
Sequence 17, Appli
Sequence 17, Appli
Sequence 11, Appli
Sequence 21, Appli
Sequence 39, Appli
Sequence 21, Appli
Sequence 39, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                Description
                  Sequence
Sequence
      6, Appli
70, Appl
. 5219991
                                                                                                                            ACTERISTICS:

ACTERISTICS:

AMBID acids

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: per'

US-08-713-885-6
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US-08-713-885-6
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Patent No. 5985833
                                                                                                              Query Match
Best Local
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                                                                                                Matches
                                                                                                                                                                                                                                                                                      CLASSIFICATION: 514
ATTORIEV/AGENT INFORMATION:
NAME: Baker, Jean C.
REGISTRATION NUMBER: 35,433
REFERENCE/DOCKET NUMBER: 9602
TELECOMMUNICATION INFORMATION:
TELEPHONE: (414) 277-5709
TELEFAX: (414) 271-3552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (414) 271-355
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: MOSESSON, MIC
APPLICANT: Meh, David A.
TITLE OF INVENTION: THRO
                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOCTWARE: PATENTIA RELEASE #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: THROMBIN INHIBITOR NUMBER OF SEQUENCES: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Quart
STREET: 411 East
CITY: Milwaukee
STATE: Wisconsin
COUNTRY: U.S.A.
ZIP: 53202-4497
                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                            Local
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5; Conserv
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411 East Wisconsin
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US-08-669-161A-21
US-08-669-161A-24
US-07-978-895-8
US-08-473-119-8
US-08-478-352-8
US-08-478-352-8
US-08-937-610-9
US-08-937-610-9
US-08-937-610-9
US-08-937-610-9
US-08-937-7598-488-16
US-08-937-7598-488-16
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                                                                                                                                                ROZEK T., Wegener K.L., Bowie J.H., Olver I.N., Carver J.A Wallace J.C., Tyler M.J.;
Wallace J.C., Tyler M.J.;
"The antiblotic and anticancer aurein peptides from the Au bell frogs Litoria aurea and Litoria raniformis.";
bull frogs Litoria aurea and Litoria raniformis.
bull frogs Litoria aurea and Litoria raniformis.
bull frogs Litoria aurea and Litoria raniformis.
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Litoria raniformis, and Litoria aurea (Australian frog).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
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SEQUENCE
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Submitted (MAY-1996) to the
EMBL; U59415; AAB02934.1; -.
INTERPRO; IPRO00392; -.
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    (FRAGMENT).

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Pred. No. 2.1e+03;
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01-MAY-1999
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Q9PS70;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
LOW DENSITY LIPOPROTEIN RECEPTOR-RELATED PROTEIN.
                                                                                                                                                                                                MEDLINE; 92011685.
Stifanl S., Barber D.L., Aebersold R., Steyrer Schneider W.J.;
"The laying hen expresses two different low de receptor-related proteins.";
J. Biol. Chem. 266:19079-19087(1991).
SEQUENCE 19 AA; 1861 MW; 4EEC931205620608
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Eukaryota: Metazoa; Chordata;
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Submitted (MAY-1996) to t
EMBL; U57982; AAD09466.1;
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Eukaryota; Fungi; Ascomycota; Schizosaccharomycetales;
Schizosaccharomycetaceae; Schizosaccharomyces.
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01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
CALMODULIN KINASE 2 (FRAGMENT).
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Euteleostomi;
; Galliformes; Phasianidae; Phasianinae;
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1.8e+03;
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                                                                                                             2e+03;
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Best Loc
Matches
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MEDLINE, 95353219.
Hoshino T., Mizutani A
"Plant annexin form hc
aggregation.",
Biochem. Mol. Biol. I:
SEQUENCE 22 AA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CALCYCLIN-ADUCTION (BOYINE).
Bos taurus (Boyine).
Eukaryota; Metazoa; Chordata; C.
Mammalia; Eutheria; Cetartiodac
Mammalia; Bos.
                                             Q9TRC2;
Q9TRC2;
Q1-MAY-2000
Q1-MAY-2000
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Q1-JUN-2000
HEMOPROTEIN I
                Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; C
Mammalia; Eutheria; Lagomorpha;
                                                                                                                                                                                                                                                                                         SEQUENCE:
                                                                                                                                                                                                                                                                                                                    Capsicum annuum (Bell pepper).
Eukaryota; Viridiplantae; Embr
Magnollophyta; eudicotyledons;
Solanaceae; Capsicum.
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01-MAY-2000 (TrEMBLrel. 13,
01-MAY-2000 (TrEMBLrel. 13,
01-JUN-2000 (TrEMBLrel. 14,
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Mizutani
SEQUENCE
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01-MAY-2000 (TrEMBLrel. 13, L
01-MAY-2000 (TrEMBLrel. 13, L
CALCYCLIN-ASSOCIATED PROTEIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "CAP-50, a newly identified annexin, localizes fibroblast 3Y1 cells.";
J. Biol. Chem. 267:13498-13504(1992).
SEQUENCE 14 AA; 1446 MW; C8322EB96DD9C6C6
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Kobayashi R., Hidaka H
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                                             O (TrEMBLrel. 13, 0) (TrEMBLrel. 13, 0) (TrEMBLrel. 14, 0) (TREMBLREL. 14, 0) P-30 (FRAGMENT).
                                                                                                PRELIMINARY;
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MW; A36D11A1FE31
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lons; Asteridae; euasterids
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Pred. No. 1.3e+03;
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a; Leporidae;
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Ca(2+)-dependent
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7.7e+02;
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Best Loc
Matches
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01-JUL-1997
01-JUL-1997
01-MAY-2000
of full-thickness defects of Matrix Biol. 15:39-47(1996). EMBL; S83370; AAB50773.1; -. INTERPRO; IPRO00885; -. PFAM; PF01410; COLFI; 1.
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01-JUL-1997 (TrEMBLrel. 04, Last sequence up
01-MAY-2000 (TrEMBLrel. 13, Last annotation
PRO ALPHAI TYPE II COLLAGEN (FRACMENT).
Oryctolagus cuniculus (Rabbit)
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SEQUENCE
                                                                                                        "Evidence for insufficient of full-thickness defects of
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01-MAY-1999
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01-MAY-1999
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"Purification and physical properties of a nov
from rabbit peritoneal neutrophils.";
J. Biol. Chem. 269:14007-14014(1994).
SEQUENCE 20 AA; 2198 MW; 2301B618163DA419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATP-binding.
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EMBL; AF087306; AAD04082
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"Gene identification
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Escriou V.,
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Chlamydiales;
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41.7%;
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Pred. No. 1.4e+03;
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Tokumitsu H., Mizutani A., Minami H., Kobayashi R., Hidaka H.
Tokumitsu H., Mizutani A., Minami H., Kobayashi R., Hidaka H.
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Bacteria; Spirochaetales;
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Mammalia; Eutheria;
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"""hes 6; Conservative
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Matches 5; Conserv
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Q9UGS1;
01-MAY-2000
01-MAY-2000
01-MAY-2000
01-MAY-2000
DJ796117.4 (
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Q9TWH5;
01-MAY-2000
                                                                                                                                                            Submitted (DEC-1999)
EMBL; AL035398; CAB63
NON_TER 1
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DJ796I17.4.

Homo sapiens (Human).

Homo sapiens (Human).

Homo sapiens (Human).

Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Immunocytochemical, electrophoresis, and immu Heliothis virescens gap junctions isolated in of protease inhibitors."; Cell Tissue Res. 281:179-186(1995). SEQUENCE 20 AA; 2304 MW; A298D3EB3E89586B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 14, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
01-JUN-2000 (TREMBLrel. 14, Last annotation update)
40 KDA GAP JUNCTION PROTEIN (FRAGMENT).
Heliothis virescens (Noctuid moth) (Owlet moth).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insect
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata;
Noctuoidea; Noctuidae; Heliothinae; Heliothis.
Q9TRQ7
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(TremBLrel. 13, Last annotation update)
(NOVEL PROTEIN SIMILAR TO GS2) (FRAGMENT).
                                                                                              Conservative
PRELIMINARY;
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Pred. No. 6.5e
3; Mismatches
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Pred. No. 5.7e+02;
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                                                                                                                                                                                                                         Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
PRT;
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1: sp_archea:*
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3: sp_fung1:*
4: sp_inverteb:
6: sp_mammal:*
7: sp_mhc:*
8: sp_organe1:
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:
12: sp_virus:*
13: sp_vertebr:
14: sp_unclass
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134
1 RDGFLLLQMDFGFP
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Q9x534 leclercia a	096417 drosophila	085406 coxiella bu	Q50082 mycobacteri	Q9s8p2 raphanus sa	079846 asplenium n	Q9r1u8 mus musculu	Q9wvt1 rattus norv	Q9wvt2 cricetulus	Q9xta6 canis famil	09xta7 cercopithec		093050 maize strea	Q9x3d0 prochloroco				borrelia		borrelia	\vdash	'n	Q9ps42 gallus gall	Q69137 human herpe	7	Q9trz8 canis famil

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Q9TR30; O1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annocation update)
Q1-JUN-2000 (TrEMBLRel. 14, Last annocation update)
CYTOCHROME C OXIDASE SUBUNIT VIIA-L (FRAGMENT).
Ovis aries (Sheep).
CUTOCHROME C DATAGE SUBUNIT VIIA-L (FRAGMENT).
CHEATYOCE; Metazoa: Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Boyidae; Caprinae; Ovis.
                                                                                                                                                                                                               O9TRR6;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
CALCYCLIN-ASSOCIATED PROTEIN, CAP50-CA2+/PHOSPHOLIPID-BINDING PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 96092035.
Linder D., Freund R., Kadenbach B.;
Linder D., Freund R., Kadenbach B.;
"Species-specific expression of cytochrome c oxidase isozymes.";
Comp. Biochem. Physiol. B, Biochem. Mol. Biol. 112:461-469(1995).
SEQUENCE 24 AA; 2795 MW; D49D27C03B61F803 CRC64;
L-14 FRAGMENT.
Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata;
Mammalia; Eutheria; Lagomorpha; Leporida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q9TRR6
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58.3%;
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            Leporidae;
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            Vertebrata; Euteleostomi; ae; Oryctolagus.
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Matches 4
MEDLINE: 88331073.

Hall D.E., Frazer K.A., Hann B.C., Reichardt L.F.;

"Isolation and characterization of a laminin-binding protein from rat and chick muscle.";

J. Cell Biol. 107:687-697(1988).

-i- FUNCTION: CALSEQUESTRIN IS A HIGH-CAPACITY, MODERATE AFFINITY, CALCIUM-BINDING PROTEIN AND THUS ACTS AS AN INTERNAL CALCIUM STORE IN MUSCLE. THE RELEASE OF CALCIUM BOUND TO CALSEQUESTRIN THROUGH
                                                                                         SEQUENCE.
                                                                                                           Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                            01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
CALSEQUESTRIN, SKELETAL MUSCLE ISOFORM (ASPAR
                                                                                                                                                                                                                               RAT
                                                                                                                                                     PROTEIN) (FRAGMENT).
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Pernollet J.-C., Zivy M., de Vienne D.;
"The maize two dimensional gel protein database:
                                                                                                                                                                                                                                                                                                                                                                           NON_TER
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P80609;
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Eukaryota; Viridi
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yta; Liliopsida;
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ilarity 100.0%;
Conservative
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44.4%;
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Pred.
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Pred. No. 1.7e-
2; Mismatches
                                                                                                        Craniata; Vertebrata;
Sciurognathi; Muridae;
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1.7e+03;
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MIF_PIG
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Riviere S.,
Submitted (M
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
MACROPHAGE MIGRATION INHIBITORY FACTOR (MIF) (GLYCOSYLATION-INHIBITING FACTOR) (GIF) (FRAGMENT).
                                                                                                                                                                                                                                                                                        PROSITE;
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TO 50 MOLES OF CALCIUM. ALSO BINDS LAMININ.

-I- SUBCELLULAR LOCATION: THIS ISOFORM OF CALSEQUESTRIN OCC SARCOPLASMIC RETICULUM'S TERMINAL CISTERNAE LUMINAL SPIFAST SKELETAL MUSCLE CELLS. ASPARTACTIN IS FOUND IN THAMINA SURROUNDING INDIVIDUAL MUSCLE FIBERS.
-I- TISSUE SPECIFICITY: SKELETAL AND HEART MUSCLE.
-I- SIMILARITY: BELONGS TO THE CALSEQUESTRIN FAMILY.
PIR; A31049; A31149.
                                                                                                                                                                                                                                                                                                              INTERPRO;
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                                                                                                                                                                                                                                                                                                                                             iere S., Bouet F., Menez A., Galat A.;
mitted (MAR-1997) to the SWISS-PROT data bank.
FUNCTION: THE EXPRESSION OF MIF AT SITES OF INFLAMMATION
A ROLE FOR THE MEDIATOR IN REGULATING THE FUNCTION OF MAC
IN HOST DEFENSE (BY SIMILARITY).
SUBUNIT: HOMOTRIMER (BY SIMILARITY).
SIMILARITY: BELONGS TO THE MIF FAMILY.
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Similarity 100.0%;
4; Conservative
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Pred. No.
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1; Mismatches
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RESULT 11
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Matches 5; Conserv
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21-JUL-1986
01-FEB-1996
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  P45668;
                    SCX2_MESTA
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SEQUENCE
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"The preparation, purification, and amino acid sequence of a polypeptide renin substrate.";

J. Exp. Med. 106:439-453(1957).

-!- FUNCTION: IN RESPONSE TO LOWERED BLOOD PRESSURE, THE ENZYME RENIN CONVEXTING ENZYME TO LOWERED BLOOD PRESSURE, THE ENZYME RENIN CONVEXTING ENZYME) THEN REMOVED THE STRONGEN ACE (ANGIOTENSIN CONVEXTING ENZYME) THEN REMOVED THE PRESSOR SUBSTANCE KNOWN, WHICH HELPS REGULATE VOLUME AND MINERAL BALANCE OF BODY FLUIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Linder D., Freund R., Kadenbach B.;
"Species-specific expression of cytochrome c oxidase isczymes.";
Comp. Biochem. Physiol. 112B:461-469(1995).
-i- FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED FOLYPEPTIDE
CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN
MITOCHONDRIAL ELECTRON TRANSPORT.
-i- CAPALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 F(2)O +
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-!- SIMILARITY: BELONGS TO THE CYTOCHROME C OXIDASE VIIA FAMILY OXIDATED INNER MEMBRANE, MITOCHONDRION.

OXIDARY
23
23
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Equus caballus (Horse).
Equus caballus (Horse).
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PEPTIDE 1 10 ANG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1- TISSUE SPECIFICITY: MADE IN THE LIVER & SECRETED 1- SIMILARITY: BELONGS TO THE SERPIN FAMILY.
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Eutheria; Perissodactyla; Equidae; Equus.
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(Rel. 01, Last sequence update)
(Rel. 33, Last annotation update)
                                                                                                                                                                                                                                            Conservative
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83.3%;
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ANGIOTENSIN
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No. 7.8e+02;
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RESULT 12
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Matches 4
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FUJIMURA Y., Titani K., Usami Y., Suzuki M., Oyama R., Matsui T., Fujimura Y., Titani K., Ruggeri Z.M.;

Fukui H., Sugimoto M., Ruggeri Z.M.;

"Isolation and chemical characterization of two structurally and functionally distinct forms of botrocetin, the platelet coagglutinin isolated from the venom of Bothrops jararaca.";

Biochemistry 30:1957-1964(1991).

-i- FUNCTION: THERE ARE TWO DISTINCT FORMS OF THE VON WILLEBRAND FACTOR-DEPENDENT PLATELET COAGGLUTININ. THE DIMERIC FORM IS 34-TIMES MORE ACTIVE THAN THE ONE-CHAIN BOTROCETIN IN PROMOTING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDINE; 94287436.

Lala K., Narayanan P.;

Lala K., Narayanan P.;

Lala K., Narayanan P.;

"Purification, N-terminal sequence and structural characterization of a toxic protein from the Indian scorpion venom Buthus tamulus.";

Toxicon 32:325-338(1994).

-i- FUNCTION: BINDS TO SODIUM CHANNELS AND INHIBIT THE INACTIVATION OF THE ACTIVATED CHANNELS, THEREBY BLOCKING NEURONAL TRANSMISSION.

THIS TOXIN IS ACTIVE AGAINST MAMMALS. LD(50) IS 2.25 MG/KG IN MICE
NON_TER
SEQUENCE
                                                     PROSITE; PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                           BOTR_BOTJA STANDARD; PRT; 25 AA. P22028; 01-AUG-1991 (Rel. 19, Created) 01-AUG-1991 (Rel. 19, Last sequence update) 01-OCT-1994 (Rel. 30, Last annotation update) BOTROCETIN (PLATELET COAGGLUTININ) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                       Bothrops jararaca (Jararaca).
Eukaryota; Metazoa; Chordata;
Lepidosauria; Squamata; Scler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mesobuthus tamulus (Eastern Indian scorpion) (Buthus tamulus). Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida; Scorpiones; Buthoidea; Buthidae; Mesobuthus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence up
15-DEC-1998 (Rel. 37, Last anotation
NEUROTOXIN II (BT-II) (FRAGMENT).
                         Glycoprotein; Venom.
VARIANT 2
                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Neurotoxin; Sodium channel inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE.
TISSUE-VENOM;
                                                                                                                                                                                                                                                                                                 TISSUE=VENOM;
                                                                                                                                                                                                                                                                                                                                           Viperidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                  INTERPRO; IPRO01304;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 DGYLL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 80.
4; Conservative
                                                    PS00615; C_TYPE_LECTIN_1; PS50041; C_TYPE_LECTIN_2;
                                                                                                                                                                                                                                                                                                                                         Metazoa; Chordata; Craniata; ia; Squamata; Scleroglossa; Se Crotalinae; Bothrops.
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25 AA;
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2655 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17.2%;
80.0%;
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Pred. No. 1.6e
1; Mismatches
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D25D9031A705CAF8 CRC64;
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                                                    PARTIAL.
PARTIAL.
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                                                                                                                                                                                                                                                                                                                                                    Serpentes;
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                                                                                                                                                                                                                                                                                                                                                       Vertebrata; Euteleostomi;
erpentes; Colubroidea;
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                                                                                                           BONDS
                                                                                                                        SOLUBLE COMPLEX
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Best Local
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MEDLINE; 86301171.
MEDLINE; 86301171.
                                                                                                                                                                                                                                                                                                                           01-FEB-1995
01-FEB-1995
15-JUL-1998
                      entities
or send a
                                                                                                                                                               STRAIN-ATCC 4359;
Wilson S.D., Wang M., Filpula D.;
Wilson S.D., Wang M., Filpula D.;
Submitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.
-i- FUNCTION: CATALYZES AN ELECTRONEUTRAL EXCHANGE BETWEEN ARGININE
-i- FUNCTION: CATALYZES AN ELECTRONEUTRAL EXCHANGE BETWEEN ARGININE
AND ORNITHINE TO ALLOW HIGH-EFFICIENCY ENERGY CONVERSION IN THE
ARGININE DEIMINASE PATHWAY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-terminal sequence homologies in interstitial retino proteins from 10 vertebrate species."; FEBS Lett. 205:399-312(1986).
-I- FUNCTION: IRBP SHUTTLES 11-CIS AND ALL TRANS RETIN THE RETINOL ISOMERASE IN THE PICMENT EPITHELIUM AN PIGMENTS IN THE PHOTORECEPTOR CELLS OF THE RETINA.
-I- SUBCELLULAR LOCATION: INTERPHOTORECEPTOR MATRIX TH
                                                                     This SWISS-PROT entry is copyright. between the Swiss Institute of Biothe European Bioinformatics Institut
                                                                                                                                                                                                                                           SEQUENCE FROM
                                                                                                                                                                                                                                                                    Pseudomonas
                                                                                                                                                                                                                                                                              Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                           Pseudomonas
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Bridges C.D.B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mammalia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sus scrota (Pig)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INTERPHOTORECEPTOR RETINOL-BINDING PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-1989
01-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P12662;
01-OCT-1989
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                   ween the Swiss Institute of Bioinformatics and the European Bioinformatics Institute. There are no re by non-profit institutions as long as its contenified and this statement is not removed. Usage by itles requires a license agreement (See http://www.issend an email to license@isb-sib.ch).
                                                                                                                                                          SUBCELLULAR LOCATION:
                                                                                                                       PERMEASES
                                                                                                                                 SIMILARITY:
                                                                                                                                             (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBCELLULAR LOCATION: INTERPHOTORECEPTOR MATRIX THAT PERMEATES THE SPACE BETWEEN THE RETINA AND THE CONTIGUOUS LAYER OF PIGMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EPITHELIUM CELLS.
                                                                                                                                                                                                                                                                                                                                                                                                                                    ILLDNYTFPESLM
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5; Conser
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Eutheria;
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AAA16963.1;
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12, Last sequence update)
33, Last annotation update)
RR RETINOID-BINDING PROTEIN (IRBP)
                                                                                                                                                                                                                                                                                                             31, Created)
31, Last sequence update)
36, Last annotation update)
E ANTIPORTER (FRAGMENT).
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Cetartiodactyla; Suina;
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38
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                                                                                                                                                        INTEGRAL MEMBRANE
                                                                                                                                                                                                                                                                              gamma
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species.";
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Pred. No.
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                                                                                                                                                                                                                                                                              subdivision;
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                                                                                           It is produced through a collaboration
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                                 (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                           16
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ina; Suidae;
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                                                        as its content
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Sus.
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RESULT 8
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Matches
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                                                                                                                                                    Q9TRZ8;
Q9TRZ8;
Q9TRZ8;
Q1-OCT-2000 (Rel. 40, Created)
Q1-OCT-2000 (Rel. 40, Last sequence update)
Q1-OCT-2000 (Rel. 40, Last annotation update)
Q1-OCT-2000 (Rel. 40, Last annotation update)
QTTOCHROME C OXIDASE POLYPEPTIDE VIIA-HEART, MITOCHONDRIAL (EC 1.9.3.1) (CYTOCHROME C OXIDASE SUBUNIT VIIA-H) (COX VII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COXN_THUOB
P80980;
01-NOV-1997
01-NOV-1997
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Arnold S., Lee
Kadenbach B.;
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NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                              CANFA
                TISSUE-BRAIN,
                                  SEQUENCE
                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                            COX7A1 OR COX7AH
Canis familiaris
                                                                                                                                                                                                                                                                                            COXK_CANFA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
CYTOCHROME C OXIDASE POLYPEPTIDE VIIB-HEART (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE~HEART;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "The subunit structure
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11 DGFLTL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATALYTIC ACTIVITY: 4 FERROCYTOCHROME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 FERRICYTOCHROME C.
                                                                                                                                                                                                                                                                                                                                                                                        FHLFYGDNGMPVH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Biochem.
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                                    FROM
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                                                                                                                                                                                                                                                                                          STANDARD;
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                                                                                                                (Dog).
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                  HEART;
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                                                                        Chordata;
Carnivora;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18
46
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39
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Pred. No.
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                                                                      Craniata; Ve; Fissipedia;
                                                                                                                                                                                                                                                                                          PRT;
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ia; Canidae;
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""" hes 7; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Identification of tissue-specific isoforms for subunits Vb and VI: of cytochrome c oxidase isolated from rainbow trout."; Eur. J. Biochem. 221:1111-1116(1994).
-!- FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN MITOCHONDRIAL ELECTRON TRANSPORT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-OCT-1994 (Rel. 30, Created)
01-OCT-1994 (Rel. 30, Last sequence update)
01-OCT-2000 (Rel. 40, Last annotation update)
CYTOCHROME C OXIDASE POLYPEPTIDE VIIA-LIVER (EC 1.9.3.1) (VIIIC)
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11 FUNCTION: TRBP SHUTTLES 11-CIS AND ALL TRANS RETINOIDS BETWEEN THE REPITIOL ISOMERASE IN THE PIGMENT EPITHELIUM AND THE VISUAL PIGMENTS IN THE PHOTORECEPTOR CELLS OF THE RETINA.

11 SUBCELLULAR LOCATION: INTERPHOTORECEPTOR MATRIX THAT PERMEATES THE SPACE BETWEEN THE RETINA AND THE CONTIGUOUS LAYER OF PIGMES EPITHELIUM CELLS.

PIR: A24417: A24417.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oxidoreductase; Inner membrane; Mitochondrion NON_TER 23 23
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SEQUENCE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleost
Actinopterygii; Metagopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vitamin A; Transport.
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Fong S.L., Cook R
Bridges C.D.B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freund R., Kadenbach B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-LIVER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        proteins from 10 vertebrate species.";
FEBS Lett. 205:309-312(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBCELLULAR LOCATION: MITOCHONDRIAL INNER MEMBRANE SIMILARITY: BELONGS TO THE CYTOCHROME C OXIDASE VI. 843632; S43632.
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                                                                                                                                                              LFQAXNGIPVHL 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24 AA;
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                                                                                                                                                                                                                                                                                                                                       Score 27;
Pred. No.
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CCAA_STRTI
ID CGAA_STRTI STANDARD; PRT; 24 AA.

AC P80436;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 01-NOV-1995 (Rel. 32, Last annotation upd
RESULT
IRBP_PIG
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kowallik K.V., Stoebe B., Schaffran I., Farance of a chlorophyll odontella sinensis.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YCXD_ODOSI STANDARD; PRT; 26 AA. p49839; p49839; O1-OCT-1996 (Rel. 34, Created) O1-OCT-1996 (Rel. 34, Last sequence update) O1-OCT-1996 (Rel. 34, Last annotation update) HYPOTHETICAL 3.2 KDA PROTEIN IN RPOC2-RPS2 INTERGENIC
  IRBP_PIG
                                                                                                                                                                                                                                                                                                                                         Chloroplast; Hypothetical SEQUENCE 26 AA; 3137 M
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Eukaryota; s
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Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Actinomycetales; Streptomycineae; Streptomycetaceae; Streptomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Plant Mol. Biol. Rep. 13:336-342(1995).
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                                                                                                                                                                                                                                                                                                                                                                                       EMBL; Z67753; CAA91747.1;
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; Score 33; DB 1; Len ; Pred. No. 48; 0; Mismatches 5;	nnbach B.; on of cytochrome c oxidase. on of cytochrome c oxidase. 28:461-469(1995). IS ONE OF THE NUCLEAR-CODE! OXIDASE, THE TERMINAL OXID. TRANSPORT. FERROCYTOCHROME C + O(2) = : MITOCHONDRIAL INNER MEMBRAN O'THE CYTOCHROME C OXIDASE V Drane; Mitochondrion.	ted) sequence update) annotation update) EPTIDE VIIA-LIVER/HEART, MI' COXIDASE SUBUNIT VIIA-L) (FI ta; Craniata; Vertebrata; El iodactyla; Ruminantia; Peco	ALIGNMENTS PRT; 24 AA.	UP25_UPEIN ITRA_ALBJU SUCB_CANEA ACB_CANEA CMS_PSECA YD90_HAEIN CH60_THIFE ACP_ERYLO CR21_LITSP CR23_LITGI CR23_LITGI CR25_LITGI CR25_LITGI
24; els 0; Gaps 0	isozymes."; D POLYPEPTIDE ASE IN 2 H(2)O + TIA FAMILY.	TOCHONDRIAL RAGMENT). uteleostomi; ra; Bovoidea;		P82031 uperoleia i P82031 uperoleia i P24025 albizzia ju P99507 canis famil P19921 pseudomonas P45194 haemophilus P29134 thiobacillu P80919 erythrobact P56233 litoria spl P56234 litoria gil P56237 litoria gil P56237 litoria gil P21983 treponema p
	ry Match 1.6%; Score 33; DB 1; Length 24; 1.Local Similarity 58.3%; Pred. No. 48; 1.Conservative 0; Mismatches 5; Indels 0; Gaps 1.COMDFGFPEHL 17 1.	isozymes."; ED POLYPEPTIDE DASE IN 2 H(2)O + IE. VIIA FAMILY. 1 24; lels 0; Gaps 0	TOCHONDRIAL RAGMENT). Ruteleostomi; Ruteleo	SHEEP STANDARD; PRT; 24 AA. 207330; 01-0CT-2000 (Rel. 40, Created) 01-0CT-2000 (Rel. 40, Last sequence update) 01-0CT-2000 (Rel. 40, Last sequence update) 01-0CT-2000 (Rel. 40, Last annotation update) 02-0CT-2000 (Rel. 40, Last annotation update) 03-0CT-2000 (Rel. 40, Last annotation update) 04-0CT-2000 (Rel. 40, Last annotation update) 05-0CT-2000 (Rel. 40, Last annotation update) 07-0CT-2000 (Rel. 40, Last annotation update) 08-0CT-2000 (Rel. 40, Last annotation update) 09-0CT-2000 (Rel. 40, Last annotation update) 09-0C

8

Bovidae; Caprinae; Ovis

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K;KODAYAShi, H.; Inokuchi, N.; Koyama, T.; Tomita, M.; Irie, M.
Blosci. Biotechnol. Biochem. 59, 1169-1171, 1995
A.;Title: Purlfication and characterization of the 2nd 5'-nucleotide-forming nuclease from A;Reference number: PC4030; MUID:95337563
A;Accession: PC4030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytochromerc oxidase (EC 1.9.3.1) chain VIIb - bigeye tuna (fragment)
C;Species: Thunnus obesus (bigeye tuna)
C;Accession: S77989
R;Arnold, S; Lee, J; Kim, M.; Song, E.; Linder, D.; Lottspeich, F.; Kadenbach, B. submitted to the Protein Sequence Database, June 1997
A;Reference number: S77980
A;Accession: S77980
A;Molecule type: protein
A;Residues: 1-20 <ARN>
A;Residues: 1-20 <ARN>
A;Reference auclear
C;Genetics:
A;Genome: nuclear
Search completed: December 21, 2000, 08:39:30 Job time: 134 sec
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                                                                                                                                            Q
                                                                                                                                                                                                                                                                                         A;Molecule type: DNA
A;Residues: 1-23 <KOB>
C;Comment: This enzyme has 3'-nucleotidase activity.
C;Keywords: endonuclease; hydrolase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                rRNA endonuclease (EC 3.1.27.10) - shiltake mushroom (fragment)
N:Alternate names: nuclease Le3
C:Species: Lentinula edodes (shiltake mushroom)
C:Date: 21-Jul-1995 #sequence_revision 03-Aug-1995 #text_change 20-Mar-1996
C:Accession: PC4030
R:KObayashi, H.; Inokuchi, N.; Koyama, T.; Tomita, M.; Irie, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Function:
A;Pathway: oxidative phosphorylation; respiratory chain
C;Keywords: electron transfer; membrane-associated complex; mitochondrial inner membrane
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Best Local Similarity 40.2
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Best Local Similarity 42.9%;
Matches 6; Conservative
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                                                                                                      1 WGMLGHELVGFIAS 14
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Pred. No. 1.2e+03;
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Pred. No. 1e+03;
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RESULT 11
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calmodulin |
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A:Title: N-terminal sequence homologies in interstitial retinol-binding proteins A:Reference number: A91365; MUID:86301171
A:Accession: B24417
A:Molecule type: protein A:Residues: 1-25 CFON>
C:Superfamily: interphotoreceptor retinoid-binding protein C:Keywords: duplication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: Structural and immunological studies A;Reference number: S59492; MUID:96145736 A;Accession: S59492 A;Status: preliminary A;Residues: 1-15 <FRI>
                                                                                                                                                                                                                                                                                                                                                            heat shock protein 90 - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 11-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 17-Apr-1998
C;Accession: S71306
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R; Fong, S.L.; Cook,
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N;Alternate names: interstitial retinol-binding protein
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-May_1988 #sequence_revision 21-May-1988 #text_change 21-Nov-1997
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                                                                                                                                                                                                                                                     A; Molecule type: protein A; Residues: 1-15 < CON>
                                                                                                                                                                                                                                                                                 A; Reference number: S71306; A; Accession: S71306
                                                                                                                                                                                                                                                                                                 R;Conconi, M.; Szweda, L.I.; Levine, R.L.; Stadtman, E.R.; Friguet, Arch. Biochem. Biophys. 331, 232-240, 1996
A;Title: Age-related decline of rat liver multicatalytic proteinase A;Reference number: S71306; MUID:96299287
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 fission yeast (Schizosaccharomyces pombe) (fragment)
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A; Residues: 1-16 <ALE>
A; Cross-references: EM
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A; Residues: 1-16 <SIO>
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A; Residues: 1-17 <LEV>
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                                                                                                             C; Keywords:
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PH1007

If H Chain V-D-J region (wild-type clone 333) - mouse (fragment)

C; Species: Mus musculus (house mouse)

C; Date: 02-Jun-1994 #sequence_revision 02-Jun-1994 #text_change 17-Mar-1999

C; Accession: PH1607

R; Levinson; D.A.; Campos-Torres, J.; Leder, P.

J. Exp. Med. 178, 317-329, 1993
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R;Alemany, V.; Aligue, R.
submitted to the EMBL Data Library, May 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \alpha, \text{Experimental source:} patient EV, IL-2R+ synovial T-cells A;Note: sequence extracted from NCBI backbone (NCBIP:113265) C;Keywords: T-cell receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Reference number: Z22873
A;Accession: T44936
A;Status: preliminary; translated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Accession: C49048
R;Sioud, M.; Kjeldsen-Kragh, J.; Suleyman, S.; Vinje, O.; Natvig, J.B.; Forre, Eur. J. Immunol. 22, 2413-2418, 1992
A;Title: Limited heterogeneity of T cell receptor variable region gene usage in A;Reference number: A49048; MUID:92387250
A;Accession: C49048
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                                                                                                                                                                                                            A;Title: Molecular characterization of transgene-induced A;Reference number: PH1580; MUID:93301609 A;Accession: PH1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Species: Homo sapiens (man)
C;Date: 21-Jan-1994 #sequence_revision 18-Nov-1994 #text_change 30-May-1997
                                                                                                                             A; Experimental source: bone marrow pre-B lymphocyte C; Superfamily: immunoglobulin V region; immunoglobulin
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  Similarity
4; Conserv
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      Score 25; DB Pred. No. 8.3e 2; Mismatches
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Pred. No. 7.7e+02
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R;Abe, M.; Smith, C.J.; Larson, C.J.
submitted to the Protein Sequence Database, May 1998
A;Description: Involvement of "Ku-like" proteins in t
A;Reference number: A59018
A;Accession: B59018
A;Accession: B59018
A;Molecule type: protein
A;Residues: 1-17;18-26 <ABE>
A;Experimental source: breast cancer cell line MCF-7
C;Keywords: DNA binding; heterodimer
                                                                    C;Superfamily: mammalian cytochrome-c oxidase chain VIIa
C;Keywords: liver; membrane-associated complex; mitochondrion;
                                                                                                                                                                                                                                                                              cytochrome-c oxidase (EC 1.9.3.1) chain VIIa, hepatic - rainbow trout (fragment) C:Species: Oncorhynchus mykiss (rainbow trout) C:Date: 20-Oct-1994 #sequence_revision 01-Nov-1996 #text_change 18-Jul-1997 C:Accession: S43632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A:Molecule type: protein
A;Residues: 1-21 <SCH>
C;Superfamily: human hexo
C;Keywords: ATP; glycoly:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R:Schirch, D.M.; Wilson, J.E.
Arch. Biochem. Biophys. 257, 1-12, 1987
A:Title: Rat brain hexokinase: amino acid
A:Reference number: A90080; MUID:87324917
A:Accession: A32521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hexokinase (EC 2.7.1.1) I peptide III - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 12-Apr-1995
C:Accession: A32521
                                                                                                         A;Genome: nuclear
                                                                                                                                                          A; Molecule type: protein A; Residues: 1-23 <FRE>
                                                                                                                                                                                                                               Eur. J. Biochem. 221, 11
A; Title: Identification
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                                                                                                                                        A; Note: the source is designated as
                                                                                                                                                                                            A; Accession: S43632
                                                                                                                                                                                                              A; Reference number:
                                                                                                                                                                                                                                                              R; Freund, R.; Kadenbach, B
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Best Local Similarity 50.0
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Keywords: ATP; glycolysis; phosphotransferase
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                R; Friedebold, Biol. Chem. H
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              d, J.; Mayer,
Hoppe-Seyler
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formate dehydrogenase alpha chain - Alcaligenes eutrophus (fragment) C;Species: Alcaligenes eutrophus C;Date: 27-Apr-1996 #sequence_revision 13-Mar-1997 #text_change 07-May-1999 C;Accession: S59492
                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Title: Purification and ph
A;Reference number: A54077;
A;Accession: A54077
A;Status: preliminary
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C:Date: 06-Oct-1994 #sequence_revision 18-Nov-1994
C:Accession: A54077
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"-+-hes 6; Conserv
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A;Residues: 1-20 <ESC:
A;Experimental source: peritoneal neutrophils
A;Note: sequence extracted from NCBI backbone
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A; Residues: 1-26 <KOW>
A; Cross-references: EM
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A;Title: The Chloroplast Genome of a chlorophyll a+c- containing Alga, Od A;Reference number: S78238
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J. Biol. Chem. 269, 14007-14014, 1994
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  Bill, E.; , 561-568,
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       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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pir3:*
pir4:*
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  A2450
A2450
A2450
A2450
B59018
S432521
S432521
S4367
S59497
S54407
S54407
S54407
S64407
S6440
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hypothetical prote
cytochrome P450 PB
ADP, ATP carrier pr
dermorphin (Lys-7)
seed storage prote
glutathione transf
T-cell receptor de
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T-cell receptor de
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cytochrome P450 AL
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MUC1 enhancer bind
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kinase
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Oy 5	Query Ma Best Loc Matches	RESULT 2 A24417 A24417 Interphoto N;Alternat C;Species; C;Date: 2 C;Accessi R;Fong, S FEBS Lett, A;Title: N A;Reference A;Reference A;Recessi A;Roleculd A;Residues C;Keywords	Query Ma Best Loc Matches Qy 7	RESULT 1 A39504 octamer-bi C;Species C;Date:30 C;Accessic R;May, G, J, Biol. A,Title: F A;Referenc A;Accessic A;Status: A;Status: A;Residues		44444 337 543 543 543 543 543 543 543 543 543 543	
5 LLLOMDEGEPEHLL 18 I	Query Match 20.9%; Score 28; DB 2; Length 24; Best Local Similarity 35.0%; Pred. No. 4.2e+02; Matches 7; Conservative 5; Mismatches 2; Indels 6; Gaps 1;	RESULT 2 A24417 A24417 A24417 A24417 N;Alternate names: interstitial retinol-binding protein C;Species: Ovis orientalls aries, Ovis ammon aries (domestic sheep) C;Date: 21-May-1988 #sequence_revision 21-May-1988 #text_change 21-Nov-1997 C;Accession: A24417 R;Fong, S.L.; Cook, R.G.; Alvarez, R.A.; Liou, G.I.; Landers, R.A.; Bridges, C.D FEBS Lett. 205, 309-312, 1986 A;Title: N-terminal sequence homologies in interstitial retinol-binding proteins A;Reference number: A91365; MUID:86301171 A;Accession: A24417 A;Molecule type: protein A;Residues: 1-24 <fon> C;Superfamily: interphotoreceptor retinoid-binding protein C;Keywords: duplication</fon>	ry Match 20.9%; Score 28; DB 2; Length 19; t Local Similarity 71.4%; Pred. No. 3.2e+02; ches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0; 7 LOMDFGF 13 :	r-binding protein, Ku-like, 72K chain - human (fragment) ies: Homo sapiens (man) : 30-Dec-1991 #sequence_revision 30-Dec-1991 #text_change 30-Sep-1993 ssion: A39504 G.; Sutton, C.; Gould, H. 1. Chem. 266, 3052-3059, 1991 e: Purification and characterization of Ku-2, an octamer-binding protein rence number: A39504; MUID:91131605 ssion: A39504 us: preliminary cule type: protein cule type: protein	ALIGNMENTS	23 17.2 21 2 T07683	
		D.B.		relate			

Page 8

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INFORMATION FOR SEQ ID NO: 4
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-159-339A-401
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APPLICATION NUMBER: PCT/US91/02942
FILING DATE: 19910429
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9009549.8
FILING DATE: 27-APR-1990
ATTORREY/AGENT INFORMATION:
NAME: FOX, SAM L
REGISTRATION NUMBER: 30,353
REFERENCE/DOCKET NUMBER: 1011.0586600
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: (202) 833-8716
INFORMATION FOR SEQ ID NO: 88:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 20.9%;
Best Local Similarity 66.7%;
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 88, Application PC/TUS9102942 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 29-NOV-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA: 07/926,666
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Weber Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEPAX: (415) 576-0300
                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: ROTHLEIN ROBERT APPLICANT: ADAIR, JOHN R APPLICANT: ATHMAL DILJET S TITLE OF INVENTION: HUMANIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13 FPEHLL 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1225 Conr
CITY: Washington
STATE: D.C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     20036
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HUMANIZED CDR-GRAFTED ICAM-1 ANTIBODY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   102
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Pred. No. 82;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
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; LENGTH: 10 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
pCT-US91-02942-88

Query Match
Best Local Similarity 55.6%; pred. No. 82;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps
Qy 3 GFLLQMDF 11
0 2 GWLLLSFDY 10
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Search completed: December 21, 2000, 08:39:07 Job time: 141 sec

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RESULT 13
US-08-874-763-3
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Best Local Similarity
"hes 7; Conserve
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                                                                                                                                Sequence 3, Appl
Patent No. 59723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Applic Patent No. 5863782
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                                                                                                                 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: +516 742 4366
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 amino acids
                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 25 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTAL Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/424,881
FILING DATE: 19-APR-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 9671
TELECOMMUNICATION INFORMATION:
TELEPHONE: +516,742,4343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: SYNTHETIC MAMMALIAN SULPHAMIDASE TITLE OF INVENTION: AND GENETIC SEQUENCES ENCODING S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Craig Geoffrey FREEM/
APPLICANT: Charles Phillip MORRI
APPLICANT: Lianne Cheryl BLANCH
APPLICANT: Xiao-Nui GUO
         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER STREET: 400 GARDEN CITY PLAZA CITY: GARDEN CITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: DIGIGLIO, FRANK REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 11530-0299
                                                                                                                                                                                                                                            3 RNALLLLADDGGF 15
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                                                                                                                                                   Application US/08874763
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NEW YORK
     John Joseph HOPWOOD
Hamish Steele SCOTT
Craig Geoffrey FREEMAN
Charles Phillip MORRIS
Lianne Cheryl BLANCH
Xiao-Nui GUO
                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Craig Geoffrey FREEMAN
Charles Phillip MORRIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hamish Steele SCOTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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53.8%;
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                                                                                                                                                                                                                                                                                                                                 Score 29; |
Pred. No. 1
                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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5;
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                                                                                                                                                                                                                                                                                                                                              Length 25;
                                                                                                                                                                                                                                                                                                              Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; STRANDEDNESS: Sir
; TOPOLOGY: linear
; MOLECULE TYPE: pept
US-08-874-763-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-159-339A-401
                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
APPLICANT: Sette, Alessandro
APPLICANT: Cells, Esteban
TITLE OF INVENTION: HLA BINDIN
TITLE OF INVENTION: Uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 401, Application US/08159339A Patent No. 6037135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNET/AUGUSTON

NAME: DIGIGLIO, FRANA J. 346

REGISTRATION NUMBER: 31,346

REFERENCE/DOCKET NUMBER: 9671

TELECOMMUNICATION INFORMATION:

"PTLEPHONE: +516 742 4343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: +516 742 4366
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08,
APPLICATION DATE: 19-APR-1995
ATTORNEY/AGENT INFORMATION:
NAME: DIGIGLIO, FRANK S.
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,339A
                                                                                        COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/874,763
                                                                                                                                                                                              NUMBER OF SEQUENCES: 1254
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: SY
TITLE OF INVENTION: AN
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                 STREET: Two Embarcac
CITY: San Francisco
                                                                                                                                                                  STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 400 GARDE CITY: GARDEN CITY
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Pred. No. 1.7e
1; Mismatches
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. 1.7e+02;
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-527-7700
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                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 18-JUN-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/827,618;
FILING DATE: 09-APR-1997
CLASSIFICATION: 45
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/485,725
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel I
                                                   REFERENCE/DOCKET NUMBER: A-TELECOMMUNICATION INFORMATION: TELEPHONE: 415-781-1989
                                                                                                       FILING DATE: 21-SEP-1990
ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
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TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
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; MOLECULE TYPE:
US-08-827-618A-22
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US-08-483-952A-22
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                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-60
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
                                                                                               INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert STREET: Four Embarcadero Center, Suite 3400
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APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel J
                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/716,909
FILING DATE: 18-JUN-1991
CLASSIFICATION: 536
                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07
FILING DATE: 21-SEP-1990
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
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                 MOLECULE TYPE:
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STRANDEDNESS: single
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                              STRANDEDNESS:
TOPOLOGY: li
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                                                                              20 amino acids
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07-JUN-1995
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Pred. No. 1.3e+02;
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                                                                                         Sequence 22, Application US/08484530 Patent No. 5846740
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Best Local Similarity 40.9
Matches 9; Conservative
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                                                                           GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (415) 326-2400
TELEFAX: (415) 326-2422
INFORMATION FOR SEQ ID NO: 85
   APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L.
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 15522-000710
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/156,671
FILING DATE: 22-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M
REGISTRATION NUMBER: 30,223
                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
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CURRENT APPLICATION DATA:
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MOLECULE TYPE:
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COPPRADED: PARTIES
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                                                                                                                                                                                                                                                                                                                                                                             unknown
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02-MAR-1995
ON: 435
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telomerase core protein 1 (TCP1)"
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Pred. No. 1.2e+02;
1; Mismatches 3;
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Pred. No. 1.2e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/08468540B Patent No. 5858980
                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICATION NUMBER: US/08/468,540B FILING DATE: 06-UUN-1995 CLASSIFICATION: 514 PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                              COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby P.C.
STREET: 805 Third Avenue
                                                                                                                                                                                                                                                                                                           APPLICANT: Weiner, Howard
APPLICANT: Hafler, David
APPLICANT: Miller, Ariel
APPLICANT: Miller, Ariel
APPLICANT: Miller, Ariel
APPLICANT: Al-Sabbagh, Ahmad
TITLE OF INVENTION: SUPPRESSION OF T-CELL PROLIFERATION
USING PEPTIDE FRAGMENTS OF MYELIN BA
                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                  STREET: 805 Th
CITY: New York
STATE: NY
                                                                                                                                                                                  COUNTRY: U
ZIP: 10022
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21.6%;

Score 29; DB 2; pred. No. 1.3e+02; wiematches 3;

Length 20; Indels

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BASIC PROTEIN

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SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                            TELEPHONE: 415-781-19
TELEFAX: 415-398-3249
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                     CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-60780-8/RFT/WTK
                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,530
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert
STREET: Four Embarcadero Center, Suite 3400
                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 415-781-1989
     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: Four Embarca
CITY: San Francisoc
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Best Local
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                                                                              CLASSIELCALION
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 08/021,536
FILING DATE: February 23, 1993
ATTORNEY/AGENT INFORMATION:
NAME: NO. 5717058ak, Henry P.
REGISTRATION NUMBER: 3200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (202) 833-87 INFORMATION FOR SEQ ID NO:
                 TELEFAX: 303-444-3013 INFORMATION FOR SEQ ID NO:
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: GB 9009549.8 FILING DATE: 27-APR-1990 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 26 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 10 TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                    COMPUTER: Apple Macintosh
OPERATING SYSTEM: System
SOFTWARE: Microsoft Word:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
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ADDRESSEE: Somatogen, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Anderson, David C.
TITLE OF INVENTION: Modulators of Gene Expression
NUMBER OF SEQUENCES: 57
SEQUENCE CHARACTERISTICS:
                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 303-541-3322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM:
SOFTWARE: Patentl
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REGISTRATION NUMBER: 30,353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
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                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/199,508
FILING DATE: February 18, 1994
                                                                                                                                                                                                                                                                                                                                                                      STATE:
                                                                                                                                                                                                                                                                                                                                                                                     STREET: 5797 (
CITY: Boulder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 RDGFLLLQMDF 11
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                                                                                                                                                                                                                                                                                                                                                                                                     5797 Central Avenue
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Anthony-Cahill
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matthews, Maura-Ann H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23.9%; ilarity 54.5%; Conservative
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, 833-8716
-- NO: 98:
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David C.
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Pred. No.
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Best Local Similarity 38.5
Matches 5; Conservative
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                                                                                               TELEFAX: (415) 576-03 INFORMATION FOR SEQ ID NO:
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ETILING DAIL.

CLASSIFICATION:

CHASSIFICATION DATA:

APPLICATION NUMBER: US 08/844,419

APPLICATION NUMBER: 18-APR-1997
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                                                                                                           ATTORNEY/AGENT INFORMATION:

NAME: APPLE REGISTRATION NUMBER: 36.429
REFERENCE/DOCKET NUMBER: 015389-002930US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/724,643
FILING DATE: 01-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/846,017
FILING DATE: 25-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 22 amino acids
 TOPOLOGY: 1
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11 FGFPEHLLVDFLQ 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                             FILING DATE: 0
CLASSIFICATION:
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                                 STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 FGYPVYVFGDCVQ 13
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5. 6093809
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                                                amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Andrews, William H.
VENTION: No. 6093809el Telomerase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Morin, Gregg B.
Harley, Calvin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nakamura, Toru
Chapman, Karen B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lingner, Joachim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cech,
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E: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Townsend and Townsend and Crew LLP 40 Embarcadero Center, 8th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                  UMBER: US/08/851,843A
06-MAY-1997
peptide
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Pred. No.
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US-08-940-096-133; Application US/08940096; Patent No. 6046166;
                                                                         RESULT
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Best Local Similarity
Thes 7; Conserve
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US-08-940-093-133
                                                                                                                                                                                Query Match
Best Local S
Matches 7
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           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: 650-493-493
TELEFAX: 650-493-5556
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 22 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: COTUZZÍ, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 00°
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                            TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 1155 AV
CITY: New York
STATE: NY
                                                                                                                                                                                  Local Similarity les 7; Conserv
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                                                                                                                                                 15 EHLLVDFLQSLS 26
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Cornut, Isabelle
Metz, Gunther
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                                                                                                                                                                                                                                                                                              linear
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58.3%;
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                                                                                                                                                                                               Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 32; DB Pred. No. 47;
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                                                                                                                                                                             Indels
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PCT-US91-02942-98
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 650-493-5556
TELEFAX: 650-493-5556
TELEX: 66141 PENNIE
INFORMATION FOR SEO ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 22 amino acids
                                                                                                                                                                                                                                       Sequence 98, Applicat GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 7; Conserv
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                     APPLICANT: ROTHLEIN, ROBERT
APPLICANT: ADAIR, JOHN R
APPLICANT: ATHWAL, DILJEET S
TITLE OF INVENTION: HUMANIZED CDR-GRAFTED ICAM-1 ANTIBODY
NUMBER OF SEQUENCES: 102
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A
REGISTRATION NUMBER: 30,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/940,096
FILING DATE: 29-SEP-1997
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Buttner, Klaus
APPLICANT: Cornut, Isabelle
APPLICANT: Metz, Gunther
TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 258
CORRESPONDENCE ADDRESSE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                  COUNTRY: USA
ZIP: 20036
                                                                              STREET: 1225 Conr
CITY: Washington
STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM CONTROL OPERATING SYSTEM: SOFTWARE: FastSE
                                                                                                                                                                                                                                                                                                                                                         15 EHLLVDFLQSLS 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 10036-2811
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TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                              ADDRESSEE:
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                                                                                                                                                                                                                                                          Application PC/TUS9102942
                                                                                                              E: Sterne, Kessler, Goldstein & Fox
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Pred. No.
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Title:

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Scoring table:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              length:
                                                                                                                                                                                                                                                                                                                                                                                               Issued_Patents_AA:*
1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
5: /cgn2_6/ptodata/2,
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length: 26
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Gapop 10.0 , Gapext 0.5
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134
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GenCore version 4.5
Copyright (c) 1993 - 2000 Comp
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/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/COMB.pep:*
/cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/2/iaa/backfiles1.pep:*
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US-08-940-096-133
US-08-940-096-133
US-08-940-096-139
PCT-US91-02942-98
US-08-195-1843-170
US-08-815-1843-170
US-08-815-8438-170
US-08-848-5408-2
US-08-48-5408-3
US-08-48-143-3
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US-08-944-095-134
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US-08-482-142-13
US-08-482-142-13
US-08-482-142-13
US-08-487-192-13
US-08-487-192-13
US-08-487-192-13
US-08-487-192-13
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Sequence 133, App
Sequence 98, Appli
Sequence 2, Appli
Sequence 85, Appli
Sequence 85, Appli
Sequence 22, Appli
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                     3, Appli
401, Appl
88, Appl
134, App
134, App
22, Appl
22, Appl
34, App
22, Appl
34, App
22, Appl
34, App
134, App
168, App
168, App
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US-08-940-095-133
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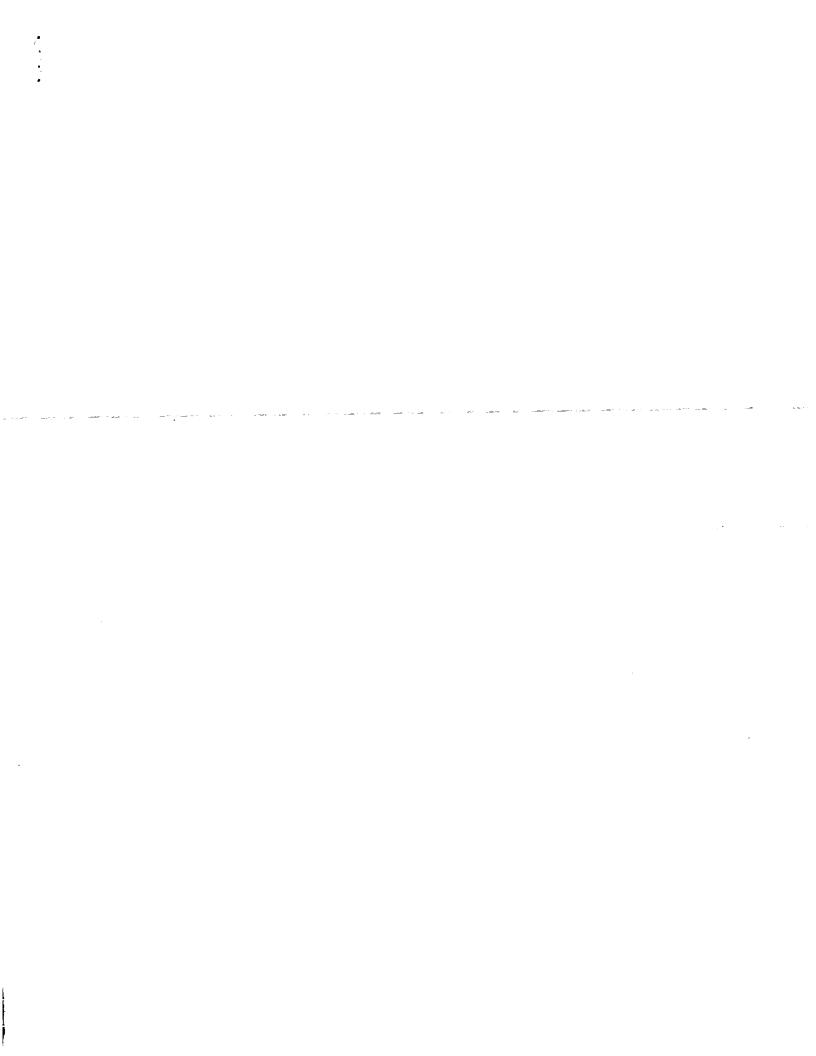
Result

No.

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
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US-08-482-142-99	US-08-482-142-84	US-08-749-707-12	US-08-559-524A-12	US-08-945-168-13	US-08-162-149-10	US-07-678-974D-8	US-08-860-339-10	US-08-596-257A-10	US-08-478-572-85	US-08-482-142-85	PCT-US95-17082A-14	US-08-940-371-14	US-08-667-769A-14	US-08-4/0-110A-14	US-08-46/-420A-14	US-08-765-783A-83
Sequence 99, Appl	Sequence 84, Appi	-	, ,	Sequence 13, Appr	; ;		,	10,	3 0	200	o ⊢	14,	14,	14,		

ALIGNMENTS

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; MOLECULE TYPE: US-08-940-095-133
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                                                                                                         TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Dufourcy, Jean
TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 650-493-4935
                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, Laura A
REGISTRATION NUMBER: 30,
                                                                                                                                                                                                                                                                                           CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 1155 AVCCITY: New York
STATE: NY
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
                                   STRANDEDNESS:
TOPOLOGY: lin
                                                                                                                                                              TELEFAX:
                                                                                                                                                                    TELEPHONE: 650-493-493
TELEFAX: 650-493-5556
                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                        LENGTH:
                                                                       H: 22 amino acids amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Pennie & Edmonds LLP
1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sekul, Renate
Buttner, Klaus
Cornut, Isabelle
Metz, Gunther
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dasseux,
                                         linear
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                      No. 6004925e
                                                        single
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                                                                                                                                                                                                                                        30,742
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Best Local Similarity 66.7%; Pred. No. 3e*05;
Accessor 1; Mismatches 1; Indels 0; Gaps 0;

OV 8 RGLPG 13

Db 11 | 11 | 11 |

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Search completed: December 21, 2000, 08:35:33

Job time: 596 Sec

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RESULT
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Best Local S
Matches 4
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Best Local S
Matches 4
                                                                                               Bos taurus (Bovine).
Eukaryota; Metazoa; C
Mammalia; Eutheria; C
Bovidae; Bovinae; Bos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE.
MEDLINE: 94284958.
Fluge O., Sletten K., F
"In vitro toxicity of p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 93280199.
Min D.S., Kim D.M., I
"Purification of a nucerebellum.";
J. B101. Chem. 268:1:
SEQUENCE 18 AA; 1:
                                                                                                                                                                 Q9TRCO;
Ol-MAY-2000 (TrEMBLrel. 13, Created)
Ol-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Ol-JUN-2000 (TrEMBLrel. 14, Last annotation updat
ENTEROTOXIN-BINDING GLYCOPROTEIN PP16K (FRAGMENT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                culture.";
J. Pediatr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q9S8M8 PRELIMINARY; PRT; 19 AA. 09S8M8; 01-MAY-2000 (TrEMBLrel. 13, Created) 01-MAY-2000 (TrEMBLrel. 13, Last sequence up 01-JUN-2000 (TrEMBLrel. 14, Last annotation FRIII-2-VIII-GANMA-GLIADIN (FRAGMENT).
                      MEDLINE; 94259890.
Shida K., Takamiza
                                                              SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J. Pediatr. Gastroenterol. SEQUENCE 19 AA; 2240 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Triticum aestivum (Wheat).
Eukaryota; Viridiplantae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bovidae; Bovinae; [1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bos taurus (Bovine)
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
PHOSPHOINOSITIDE-SPECIFIC PHOSPHOLIPASE C ISOZYME C
                                                                                                                                                                                                                                                                              Q9TRC0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Magnoliophyta; Liliopsida;
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  hida K., Takamizawa
Enterotoxin-binding
                                                                                                                                                                                                                                                                                                                                                                                                                11 PTGQAQ 16
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nes 4; Conser
                                                                                                                                                                                                                                                                                                                   <u>_</u>3
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||| |:
|GLPXGK 12
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AA; 1927 MW; 1E37AE00CFC2AFC1 CRC64;
                                                                                                   Bos.
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novel phos
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Cetartiodactyla; Ruminantia; Pe
                                                                                                                   Cetartiodactyla;
                                                                                                                                        Chordata;
K., Nagaoka M.,
glycoproteins i
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purified g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .08;
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phospholipase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Embryophyta; Tracheophyta; Spermatophyta; Poales; Poaceae; Triticum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nutr. 18:186-192(1994).
; FC0F56FCB41B5C81 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
Pred.
1; Mis
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Pred. No. 2e+(
1; Mismatches
                                                                                                                                      Craniata;
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gluten peptides tested
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No.
    'n
Kushiro
n a prote
                                                                                                                 ta; Vertebrata; Euteleostomi;
Ruminantia; Pecora; Bovoidea
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e C
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                                                                                                                                                                             (FRAGMENT).
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2e+03;
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1.9e+03;
shiro A., Osawa T. proteose-peptone
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isozyme
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e from
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bovine
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  fraction
                                                                                                                   Bovoidea;
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RESULT
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Best Local 9
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Best Local
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01-JUL-1997
01-JUL-1997
01-NOV-1998
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Q9PXE4;
Q1-MAY-2000
01-MAY-2000
01-JUN-2000
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Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE; 96100820.
Piatti P., Hassard S., Newman J.F., Brown F
"Antigenic variants in a plaque-isolate of
"virus: implications for vaccine production.
Vaccine 13:781-784(1995).
SEQUENCE 20 AA; 1925 MW; E91F87C99C19D7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         heated bovine milk.";
J. Dairy Sci. 77:930-939(1994).
SEQUENCE 20 AA; 2321 MW; C738FD14F55C74C3
                          NON_TER
                                                                             "Stability of AML1 (core) site induced by attenuated SL3-3 mu J. Virol. 71:5080-5087(1997).
                                                                                                                                                                                               Amtoft H.W.,
Pedersen F.S.
                                                                                                                                                                                                                                                  STRAIN-NMRI; TISSUE-MURINE RETROVIRUS MEDLINE; 97332339.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VIRUS
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  SEQUENCE
                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA PROVIRUS
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|:|:||
7 EVFREL
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4; Conservative
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Metazoa; Chordata; C
Metazoa; Rodentia; ?
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TremBLrel. 04, Created)
(TremBLrel. 04, Last sequence update)
(TremBLrel. 08, Last annotation update)
S INTEGRATION SITE IN TUMOR INDUCED BY M
, ISOLATE GTT TUMOR03-3 (FRAGMENT).
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Ş.
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                                                                                                                                                                    site
293E01E865A776D8 CRC64;
                                                                                                                                      murine leukemia virus
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Last sequence update)
Last annotation updat
                                                                                                                                                                                                                          Bareil
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Pred.
2; Mis
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                                                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata;
Sciurognathi; Muridae;
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No.
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2.1e+03;
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2.1e+03
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                                                                                                                                                                                                                       Schmidt J.,
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                                                                                                                                                                                                                                                                             TUMOR;
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Best Local S
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Best Local S
Matches
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Q9S8V3;
Q1-MAY-2000 (TrEMBLrel. 13, C
Q1-MAY-2000 (TrEMBLrel. 13, L
Q1-JUN-2000 (TrEMBLrel. 14, L
GAMMA 1 GLIADIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
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MEDLINE; 93009000.
Sjostrom H., Friis
"purification and c
disease.";
Clin. Chim. Acta 20
SEQUENCE 15 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Triticum aestivum (Wheat).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; Liliopsida; Poales; Poaceae; Triticum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q958V2 PRELIMINARY; PAT; 13 AAA.
Q958V2; Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
QANMA 2 GLIADIN (FRAGMENT).
Triticum aestivum (Wheat).
Eukaryota; Viridiplantae; Embryophyta; Tracheophy
Bukaryota; Viridiplantae; Embryophyta; Tracheophy
Magnoliophyta; Liliopsida; Poales; Poaceae; Triti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "purification and characterisation disease."; Clin. Chim. Acta 207.227
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nes 4; Conserv
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n H., Friis S.U., Noren O.,
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15 AA; 1742 MW; 2B5C8365ACC8B32E CRC64;
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; 1664 MW; 2B5C932C3CCDA72E CRC64;
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Pred. No. 1.5e+03;
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pred. No. 1.5e+03;
1; Mismatches 1
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Pred. No. 1.5e+03;
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differentiation.";
J. Blol. Chem. 277
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Q9QUZ5;
Q1-MAY-2000
Q1-MAY-2000
Q1-JUN-2000
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation updat
38-42 KDA COSTIMULATORY FACTOR (FRAGMENT).
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Mammalia; Eutheria;
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Q9UQG8;
Q1-MAY-2000
Q1-MAY-2000
Q1-MAY-2000
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                                                                                                                                                                                                                                                                                                                           Nichols W.C., Terry V.H., Wheatley M.A., Yang A., Zivelin Ciavarella N., Stefanile C., Matsushita T., Saito H., de B Ruiz-Saez A., Torres A., Thompson A.R., Feinstein D.I., Wh Negrier C., Vinciguerra C., Aktan M., Kaufman R.J., Ginsbu Seligsohn U.;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human)
Eukaryota; Metazoa; C
Mammalia; Eutheria; E
                                                                                                                                                                                                                                 EMBL; AF NON_TER NON_TER
                                                                                                                                                                                                                                                         "ERGIC-53 gene structure and mutation vand vIII deficiency families."; blood 93:2261-2266(1999). EMBL; AF081879; AAD32486.1; JOINED. EMBL; AF081878; AAD32486.1; JOINED.
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MEDLINE; 99192442.
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Q9TRG0;
01-MAY-2000
                          Q9TRG0
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  (TrEMBLrel.
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\A; 1758 MW; F10C664C976A5D19
                             PRELIMINARY;
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Rodentia;
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66.7%;
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Last annotation update)
INTERMEDIATE COMPARTMENT
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Sciurognathi; Muridae; Murinae; Mus
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    Created)
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1.9e+03
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White G.C.,
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Best Local S
Matches 5
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PRELIANCE
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O9R514
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2000 (TrEMBLrel. 14, Last annotation update)
O1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
17 KDA LYSINE-SPECIFIC CYSTEINE PROTEINASE (FRAGMENT).
POORPhyromonas gingivalis (Bacteroides gingivalis).
Pacteria; CFB group; Bacteroidaceae; Porphyromonas.
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Q9S8W0;
01-MAY-2000
01-MAY-2000
01-JUN-2000
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Kuter D.J., Beeler D.L., Rosenberg R.D.;

"The purification of megapoietin: a physiological regulator

"The procyte growth and platelet production.";

Proc. Natl. Acad. Sci. U.S.A. 91:11104-11108(1994).

SPONTENCE 17 AA; 1975 MW; DA3A5E835A755C9D CRC64;
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01-MAY-2000 (TrEMBLrel 13, Created)
01-MAY-2000 (TrEMBLrel 13, Last sequence update)
01-MAY-2000 (TrEMBLrel 13, Last annotation update)
MEGAPOIETIN-MEGAKARYOCYTE GROWTH AND PLATELET PRODUCTION
Ovis aries (Sheep).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Hovoidea
Bovidae; Caprinae; Ovis.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
HIGH-MOLECULAR-WEIGHT GLUTENIN SUBUNIT 7 (FRAGMENT).
Triticum aestivum (Wheat).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta;
Magnollophyta; Lillopsida; Poales; Poaceae; Triticum
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"Intermolecular disulfide bonds link specific high-molecular-weight glutenin subunits in wheat endosperm.";
Blochim. Blophys. Acta 1159:13-21(1992).
SEQUENCE 19 AA; 2011 MW; 95880C10396419DA CRC64;
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ceae; Triticum
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Q9S8Z2;
Q9S8Z2;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
PHOTOSYSTEM I REACTION CENTER SUBUNIT II, PSI-D.
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Q28830;
Q1-NOV-1996
Q1-NOV-1996
Q1-NOV-1998
MEDLINE: 92249324.

Lagoutte B., Vallon O.;

"purification and membrane topology of PSI-D a of the photosystem I reaction center.";

Eur. J. Biochem. 205:1175-1185(1992).

SEQUENCE 15 AA; 1515 MW; 1A7105A4A04549A9
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Pike R., McGraw W., Potempa J., Travis J.;

Pike R., McGraw W., Potempa J., Travis J.;

"Lysine and arginine-specific proteinases fragingivalis. Isolation, characterization, and existence of complexes with hemagglutinins.";

J. Biol. Chem. 269:406-411(1994).

SEQUENCE 16 AA; 1819 MW; D864F9BF367828C6
                                                                                               Chenopodiaceae;
                                                                                                     Spinacia oleracea (Spinach).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; eudicotyledons; Caryophyllidae; Caryophyllales;
                                                                                                                                                                                                                                                                                                                                                                                          "Characterization of two isozymic forms of heart 2-kinase: Fructose 2,6-bisphosphatase."; Biochem. Blophys. Res. Commun. 180:470-474(1991). EMBL; S62278; AAB20157.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE;
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                                                                                   Query Match
Best Local S
Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q9T355
Q9T355;
Q9T355;
Q1-MAY-2000
Q1-MAY-2000
Q1-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
NADH DEHYDROGENASE SUBUNIT 6 (FRAGMENT).
Synagrops belius.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A., Wilson R.R.Jr.;

Donaldson K.A., Wilson R.R.Jr.;

"Amphi-Panamic geminates of snook (Percoidei:Centropomidae)

"Amphi-Panamic geminates of snook in the mitochondrial DNA
calibration of the divergence rate in the mitochondrial DNA
region of fishes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Acanthoptery
Percomorpha; Perciformes; Percoidei; Acropomatidae; Synagrops.
                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

Wilson R.R. Jr.;

Donaldson K.A., Wilson R.R. Jr.;

Donaldson K.A., Wilson R.R. Jr.;

Donaldson K.A., Wilson R.R. Jr.;

Pagnamic Geminates of Snook (Percoidei: Centropomidae) Provide a calibration of the Divergence Rate in the Mitochondrial DNA Control Calibration of fishes.";

Med. Phylogenet. Evol. 13:208-213(1999).

EMBL; AF12392; AF19093.1;

EMBL; AF15907; AAF08478.1;

EMBL; AF15907; AAF08478.1;
                                                                                                                                                                                                 Mitochondrion.
NON_TER 15 & SEQUENCE 15 &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Phylogenet. Evol. 0:0-0(2000).
5 ELSRGLPTG 13
||:||| |
2 ELTRGLARG 10
                                                                                        l Similarity
6; Conserv
                                                                                                                                                                                                        15 AA;
                                                                                          Conservative
                                                                                                                                                                                                           1626 MW;
                                                                                                                     29.0%;
                                                                                                      Score 29; DB 8; Le
pred. No. 2.3e+02;
uicmatches 2;
                                                                                                                                                                                                           D9E618DD6B812B71 CRC64;
                                                                                                    Mismatches
                                                                                                                                                    Length 15;
                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Acanthopterygii; Synagrops.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         provide
control
                                                                                                             0;
                                                                                                                Gaps
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Search completed: December 21, 2000, 08:32:52 Job time: 435 sec

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RESULT
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UC25
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CERB_R
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Best Local S
Matches 4
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Best Local
Matches
                                                                                                             P23436; P02682;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence of the control of the contro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON_TER
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P80631;
01-OCT-1996
01-OCT-1996
15-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _MAIZE
                                                Rattus norvegicus (Rat), and s
Enkarvota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                   RAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
UNKNOWN PROTEIN FROM 2D-PAGE OF ETIOLATED COLEOPTILE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hydrolase;
NON_TER
NON_TER
                                                                                                                                                                                                                                                               CERB_RAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genome analysis program.";
Theor. Appl. Genet. 93:997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Touzet P., Riccardi F., Morin C., Damerval C., Pernollet J.-C., Zivy M., de Vienne D.; "The maize two dimensional gel protein database
                        Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAIZE-2DPAGE; P80631; COLEOPTILE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=COLEOPTILE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zea mays (Maize).
Eukaryota; Viridiplantae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MAIZEDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Magnoliophyta; Liliopsida;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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FUNCTION: DEGRADATION OF LYSOPHOSPHOLIPIDS. MAY PLAY AN IMPORTANT ROLE IN PROTECTING THESE CELLS FROM THE CYTOLYTIC EFFECTS OF THE LYSOPHOSPHOLIPIDS PRODUCED BY THE ACTIVATION OF PHOSPHOLIPASE A2. CATALYTIC ACTIVITY: 2-LYSOPHOSPHATIDIYLCHOLINE + H(2)0 = GLYCEROPHOSPHOCHOLINE + A FATTY ACID ANION.

INDUCTION: INCREASED BY DIFFERENTIATION OF THE CELLS.

PTM: THE N-TERMINUS IS BLOCKED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or. Appl. Genet. 93:997-1005(1996).
MISCELLANEOUS: ON THE 2D-GEL THE D
PROTEIN IS: 4.9, ITS MW IS: 31.6 K
                                                                                                                                                                                                                                                                                                                                                                                                           LSRGLP
||| |
|SRSFP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MAIZE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SISLPTSNA 11
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5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123957;
                           Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lipid degradation
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20 AA;
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                                                                                                                                                                                                                                                               STANDARD;
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15
1580 MW;
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2138 MW;
                           Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21.0%;
55.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . 78;
                                                and Sus scrofa (Pig).
data; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Embryophyta; Tracheophyta; ; Poales; Poaceae; Zea.
                                                                                                                                           annotation
                                                                                                                                                                    sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 20; DB
Pred. No. 2.4e
0; Mismatches
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Pred. No. 2.26
0; Mismatches
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                  Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15B38F6D23D89567
                                                                                                                                        update)
on update)
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2;
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                     Murinae;
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LEC3_MACPO
ID LEC3_MAC
AC P18677
AC 01-NOV
DT 01-AUG
DE AGGLUT
OC Eukary
OC Magnol
OC ROSale
RN [1]
RP SEQUEN
RC TISSUE
RX YOUNG
RT Integr
RT Integr
RT SILPE
RY LECTI
 Вb
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Best Loc
Matches
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Matches 4
                                                                                                                    Lectin.
SEQUENCE
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Slemmon J.R., Blacher R., Danho W., Hempstead J.L., we seems and sequencing of two cerebellum-specific Proc. Natl. Acad. Sci. U.S.A. 81:6866-6870(1984).
                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1990 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last seque)
01-AUG-1991 (Rel. 19, Last annot
AGGLUTININ BETA-3 CHAIN (MPA).
Maclura pomifera (Osage orange).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Purification and characterisation of cerebellins porcine cerebellum.";
                                                                                                                                                                                                                         Young N.M., Johnston R.A.Z., Szabo A.G., Watson D.C.; "Homology of the D-galactose-specific lectins from Artocarpus integrifolia and Maclura pomifera and the role of an unusual polypeptide subunit.";
                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
                                                                                                                                                                                                                                                                                                                                                                                                                                           LEC3_MACPO P18677;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synaptosome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PIR; A03135; CQRT.
PIR; PL0124; PL0124.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J. Neurochem. 53:886-889(1989).

-!- FUNCTION: CEREBELLIN EXERTS NEUROMODULATORY FUNCTIONS.

STIMULATES NOREPIREPHRINE RELEASE VIA THE ADENYLATE CYC

DEPENDENT SIGNALING PATHWAY; AND INDIRECTLY ENHANCES

ADRENCCORTICAL SECRETION IN VIVO, THROUGH A PARACRINE PINVOLVING MEDULLARY CATECHOLAMINE RELEASE.

-!- TISSUE SPECIFICITY: LOCALIZED IN THE PURKINJE CELLS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 89341798.
Yiangou Y., Burnet
                                                                                                                                                                                                                                                                                             TISSUE-SEED
                                                                                                                                                                                                                                                                                                                                  Rosales;
                                                                                                                                                                                                                                                                                                                                             Magnoliophyta; eudicotyledons; core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SPECIES=PIG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                MEDLINE;
                                                                                                                                                                                                                                                                                                        EQUENCE
                          11
                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12 TGQAQVA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 SGSAKVA 7
  N
                                                                               Match
                                                                                                                                                        h. Biochem. Biophys. 270:596-603(1989).
FUNCTION: D-GALACTOSE-SPECIFIC LECTIN,
STRUCTURE GAL-BETA1-3-GALNAC.
SUBUNIT: FORMED OF FOUR ALPHA CHAINS AI
SIMILARITY: TO THE OTHER AGGLUTININ BET
PNGKSQ
                          PTGQAQ 16
                                                                                                                                                S03988;
                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 4; Conserv
                                                                                                                                                                                                                                                                                89206218.
                                                                                                                                                                                                                                                                                                                                  Moraceae;
                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16
                                                                                                                                              TY: TO THE S03988.
                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=BRAIN;
                                                                                                                      AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ΑA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1633 MW;
                                                                                                                      2082 MW;
                                                                                                                                                                                                                                                                                                                                  Maclura.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20.0%;
57.1%;
                                                               20.0%;
                                                                                                                                                                                                                                                                                                                                                                                                  Last sequence up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 20; DB
Pred. No. 2.5e
2; Mismatches
                                                    2
                                                                Score 20;
Pred. No.
                                                                                                                    AA38811BBD6370E0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3EFA16635343D518 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                               eudicots;
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                                                                                                                                                                                                                                                                                                                                                                                                  update)
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                                                                3.1e+03
                                                                            ВВ
                                                                                                                                                           BETA
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                                                                                                                                                                         AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA
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                                                                            1;
                                                                                                                                                                                                 BINDS THE T-ANTIGEN
                                                                                                                                                           FOUR BETA CHAINS CHAINS.
                                                                                                                                                                                                                                                                                                                                               Rosidae;
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                                                                            Length
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peptides.";
                                                                              20
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Best Local S
Matches 4
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30-MAY-2000 (Re
30-MAY-2000 (Re
30S RIBOSOMAL I
                                                                                                     This SWISS-PROT entry is copyright. It is produced through a copyred the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict most by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fo entitles requires a license agreement (See http://www.isb-sib.or.send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=71.11T;
Perrier V., Boussac
"Adenylate kinase fr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _PARDE
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                                            EMBL; U64204;
INTERPRO; IPR(
                                                                                                                                                                                                                                                                                 Submitted (JUL-1996) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: INVOLVED IN THE BINDING OF FMET-TRNA AND, HENCE, INTITATION OF TRANSLATION (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE S13P FAMILY OF RIBOSOMAL PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -!- SUBUNIT: HETERODIMER OF AN ALPHA AND A BETA CHAIN (
-!- SUBCELLULAR LOCATION: MITOCHONDRIAL (BY SIMILARITY)
-!- SIMILARITY: TO OTHER BETA SUBUNITS OF SUCCINYL-COA
OF MALARIE--COA LIGASE AND TO ATP CITRATE-LYASE.
HEC-IDPAGE: P99507; DOG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    dog heart proteins.";
Electrophoresis 18:2795-2802(1997).
-!- CATALYTIC ACTIVITY: SUCCINATE + COA +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SUCCINYL-COA SYNTHETASE, BETA Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata;
  Ribosomal
                                                                                                                                                                                                                                                                                                                                                                                  protein, catalyzes phosphorylation
cytochrome C.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RS13_PARDE
P72180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ligase; Glycolysis; Tricarboxylic NON_TER 20 20 20 SEQUENCE 20 AA; 2248 MW; BE8AI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dunn M.J., Corbett J.M., Wheeler C.I "HSC-2DPAGE and the two-dimensional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Paracoccus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Paracoccus denitrificans.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 98163340.
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PATHWAY: SUBSTRATE LEVEL PHOSPHORYLATION
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PS01217; SUCCINVL_COA_LIG_3; PARTIAL.
                         PS00646;
                                               IPR001892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Proteobacteria; alpha subdivision; Rhodobacter group;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Rel. 39, Created)
(Rel. 39, Last sequence update)
(Rel. 39, Last annotation update)
aL PROTEIN S13 (FRAGMENT).
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                                                                  AAB06329.1; ALT_INIT.
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                     RIBOSOMAL_S13;
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36
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                     PARTIAL
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an iron and zinc
and reduction of
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NON_TER
SEQUENCE
                                                                                                                                                                                              LPP2_HUMAN STANDARD; PRT; 20 AA. P56642; 15-DEC-1998 (Rel. 37, Created) 15-DEC-1998 (Rel. 37, Last sequence update) 15-DEC-1998 (Rel. 37, Last annotation update) LYSOPHOSPHOLIPASE HL-60 PEAK 2 (EC 3.1.1.5) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                          HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NON_TER
SEQUENCE
MISSUE-LEUKEMIA;
MEDLINE; 93111958.
Garsetti D., Holtsberg F., Steiner M.R.,
"Butyric acid-induced differentiation of
expression of a single lysophospholipase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEMS Microbiol. Lett. 126:227-231(1995).
-!- FUNCTION: CAPABLE OF BREACHING THE INSECT
-!- SUBCELLULAR LOCATION: SECRETED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "The subtilisins of the invertebrate mycopathogens Verticilli chlamydosporium and Metarhizium anisopliae are serologically functionally related.";

FEMS Microbiol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  _VERCH
                                                                                                                                                              Homo sapiens (Human)
Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00136; SUBTILASE_ASP; PROSITE; PS00137; SUBTILASE_HIS; PROSITE; PS00138; SUBTILASE_SER;
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Forkaryota; Fungi;
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                                                                                                       SEQUENCE
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15-DEC-1998
                                                                                                                                               Mammalia;
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nes 3; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                        QGAPXGLGRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
3; Conser
                                                                                                                                             Eutheria;
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32, Last sequence update)
37, Last annotation update)
PROTEASE-LIKE PROTEIN (EC 3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2113 MW;
                                                                                                                                                            Chordata;
                                                                                                                                             Primates;
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Pred. No. 2.2e
3; Mismatches
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Pred. No. 1.8e+03;
2; Mismatches 0
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                                                                                                                                         Catarrhini; Hominidae;
                                                                                                                                                              Craniata; Vertebrata; Euteleostomi;
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PARTIAL.
PARTIAL.
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      Egan F
HL-60
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hogens Verticillium
                                          R.₩.,
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                                            Clark M.A.;
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RESULT 6
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Lipoprotein; Prenylation; Pheromone.
LIPID 13 13
SEQUENCE 13 AA.
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P01370;
21-JUL-1986 (Rel. 01, C
21-JUL-1986 (Rel. 01, I
01-NOV-1991 (Rel. 20, I
TREMEROGEN A-13.
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Biochem. Biophys.
-!- FUNCTION: POTE
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MEDLINE; 94121660.
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ANNETOCIN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Annetocin: an oxytocin-related
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                                                                                                                                                                                                                                                                                           Sakagami Y., Yoshida M., Isogai A., Suzuki A.; "Peptide sex hormones inducing conjugation tube compatible mating-type cells of Tremella mesente Science 212:1525-1527(1981).
                                                                                                                                                                                                                                                                                                                                                                                                                Tremella mesenterica (Jelly fungu
Eukaryota; Fungi; Basidiomycota;
Tremellaceae; Tremella.
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                                                                                                Local
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                    SRGLPTG
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PF00220; hormone4; 1.
TE; PS00264; NEUROHYPOPHYS_HORM;
  NRGDPSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 66. 4; Conservative
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                                                                                                Similarity
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66
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                                                                                                22.0%;
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Last sequence up
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elida; Clitellata; Oligochaeta; Hap
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Pred. No.
                                                                           Score 22; DB 1;
pred. No. 9.6e+02;
2; Mismatches 1
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680304A9697BA864
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RESULT 9
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P80554;

01-OCT-1996 (Rel. 34, Crea

01-OCT-1996 (Rel. 34, Last

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BULB PROTEIN (FRAGMENT).
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SEQUENCE
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Bacteria; Firmicutes; Bacillus/Clostridium group; Clostridiaceae;
Clostridium.
SUCB_CANFA
P99507;
15-JUL-1998 +
15-JUL-1998
15-JUL-1999
PUTATIVE SUCC
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STRAIN=CV. GC
Partis M.D.,
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SEQUENCE
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Eukaryota; Viridiplantae;
Magnoliophyta; Liliopsida;
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3; Conserv
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4; Conser
 998 (Rel. 36, Created)
998 (Rel. 36, Last sequence update)
999 (Rel. 38, Last annotation update)
999 (Rel. 38, Last annotation update)
SUCCINYL-COA LIGASE [GDP-FORMING] BE
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e SWISS-PROT
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          6.2.1.4)
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P12511;
01-OCT-1989
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at risk for AIDS.";
Science 232:1548-1553(1986).
FUNCTION: TRANSCRIPTIONAL REGULATOR THAT ACTS BY BINDING TO TRANS-ACTIVATING RESPONSIVE SEQUENCE (TAR) RNA ELEMENT AND TRANS-ACTIVATION TRANS-ACTIVATION FROM THE SEQUENCE (TAR) RNA ELEMENT AND TRANS-ACTIVATION 
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SEQUENCE
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               the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency
Viruses; Retroid virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-OCT-1989
01-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; M12507; AAB12991.1; -. HIV; M12507; TAT$WMJ2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is |in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hahn B.H., Shaw G.M., Taylor M.E., Redfield R.R., Markham Salahuddin S.Z., Wong-Staal F., Gallo R.C., Parks E.S., Pa "Genetic variation in HTLV-III/LAV over time in patients v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AIDS.
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                                                                                                                                                                                                                                                                                                                                                                                             isolate of HIV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Transcription regulation; Activator;
                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleotide sequence analysis
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         European
                                                                                                                                                   SUBCELLULAR LOCATION: NUMISCELLANEOUS: THE Z-84
                                                                                                                                                                                                                                                                     S Res. Hum. Retroviruses 4:165-173(1988).
FUNCTION: TRANSCRIPTIONAL REGULATOR THAT ACTS BY BINDING TO THE TRANS-ACTIVATING RESPONSIVE SEQUENCE (TAR) RNA ELEMENT AND ACTIVATES TRANSCRIPTION INITIATION AND/OR ELONGATION FROM THE LZ
                                                                                                                              ZAIREAN MALE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBCELLULAR LOCATION: NUCLEAR; NUCLEOLAR.
MISCELLANEOUS: ISOLATES WMJ1, WMJ2, AND WMJ3 WERI
BLOOD SAMPLES SEQUENTIALLY TAKEN FROM A TWO-YEAR
SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WAS PERINATALLY INFECTED BY HER MOTHER.
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(Rel. 40, Last ann
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                                                                                                                                                                                  BINDS CYCLIN T1 (BY SIMILARITY).
LAR LOCATION: NUCLEAR; NUCLEOLAR.
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Retroviridae;
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P42998;
01-NOV-1995
01-NOV-1995
                                                                                                                                                                                                                                                         EUR. J. BIOCHEM. 248:99-10-11-27/.

-I FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN MITOCHONDRIAL ELECTRON TRANSPORT.

-I CATALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)O + 4 FERRICYTOCHROME C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COXB_THUOB STANDARD: PRT; 20 AA P80974; P80974; Ol-NOV-1997 (Rel. 35, Created) Ol-NOV-1997 (Rel. 35, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation updat CYTOCHROME C OXIDASE POLYPEPTIDE VB (EC 1.9
                                                                                                                                                                                                    Oxidoreductase; Inner membrane; NON_TER 20 20
                                                                                                                                                                                                                                     INTERPRO;
                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                               Scombridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Thunnus obesus (Bigeye tuna).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;

Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Scombroidei;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            use by non-profit institutions as long modified and this statement is not removed entities requires a license agreement (See
                                                                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                                                                                                                               Kadenbach B.;
                                                                                                                                                                                                                                                                                                                                                                        Arnold S.,
                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-HEART,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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97454291.
                                                                                                                                                                                                                         PS00848; COX5B; PARTIAL
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                                                                                                                                                                                                                                                                                                                                                                      Ι.,
                                STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                       Kim M.,
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in Mismatches
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(EC 1.9.3
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    (FRAGMENT)

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Title:

US-08-934-367-2 100

EIFQELSRGLPTGQAQVAVH

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Scoring table:

Gapop 10.0 , Gapext

BLOSUM62

Sequence: Perfect score:

Searched

87993 seqs,

Total number of hits satisfying

Maximum Minimum

DВ

seq

| length: | length:

20

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

SwissProt_39:*

Run ջ

protein on:

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protein search, using

sw model

GenCore version Copyright (c) 1993 - 2000

December 21,

2000, 08:25:37

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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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P42998 eisenia foe
P01370 tremella me
P81353 clostridium
P80554 narcissus p
P80631
P18677
P1867041
P37041
P20018
P811876
P81383
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P13179
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P72180
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P12509 human immun
P12511 human immun
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3 periplaneta
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GN TAT C
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F_ONCMY
COXF_ONCMY
P80329;
01-OCT-1994
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"Identification of tissue-specific-isoforms for subunits Vb and VIIa of cytochrome c oxidase isolated from rainbow trout.";

Bur. J. Biochem. 221:1111-1116(1994).

-i. FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN MITOCHONDRIAL ELECTRON TRANSPORT.

-i. CATALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)O + 4 FERRICYFOCHROME C.

-i. SUMCLARITY: BELONGS TO THE CYTOCHROME C OXIDASE VB FAMILY.

HSSP: P00428; 10CC.

HSSP: P00428; 10CC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-1994 (Rel. 30, Created)
01-OCT-1994 (Rel. 30, Last sequence update)
10-OCT-1994 (Rel. 30, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
15-JUL-1999 (Rel. 38, Last annotation update)
CYTOCHROME C OXIDASE POLYPEPTIDE VB-HEART (EC 1.9.3.1) (FRAGMENT).
Oncornbynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Actinopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oxidoreductase;
NON_TER 20
SEQUENCE 20 AA
                                                                                                                        TAT_HV1W2
P12509;
01-OCT-1989
01-OCT-1989
01-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INTERPRO; IPR002124; PROSITE; PS00848; CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-HEART;
       Viruses; Retroid [1]
                                                   Human immunodeficiency virus type 1 (WMJ2 isolate) (HTV-1).
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                                                                                                      PROTEIN
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(Rel. 12, Last sequence update)
(Rel. 40, Last annotation update)
(TRANSACTIVATING REGULATORY PROTE
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                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Inner membrane;
                                   viruses;
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COX5B; PARTIAL.
- mambrane; Mitochondrion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2184 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     111
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CRBL_VESOR
PSAG_CUCSA
GLN2_PINPS
RBS_PHYPA
TRP2_LEUMA
TRP2_LEUMA
TRP2_LEUMA
TRP2_STRSA
RECQ_SALTY
SCX6_TITBA
TRP3_LEUMA
TRP3_LEUMA
                                   Retroviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 27; DB 1;
Pred. No. 2.2e+02;
3; Mismatches
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                                                                                                           PROTEIN) (FRAGMENT).
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P17236
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P08871
P80627
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P56610
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cucumis sat
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streptococc
salmonella
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Result No.

Score

Query Match

Length

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COXF_ONCMY
TAT_HV1W2
TAT_HV1Z8

OXLA_OPHHA
ALAT_PIG
DNAK_MYCAV
PRCT_PERAM
LMIP_LOCMI
BPPB_AGKHA
ORCK_ORCLI
SONA_STRGR
C10A_RAT
EFG_THEAQ
CRM35_YEAST
COOT_SARBU
OXLA_AGKRH
CPAX_BOVIN

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TAT_HV1Z8
COXB_THUOB
OXYT_EISFO
TA13_TREME
UN12_CLOPA
BULB_NARPS
SUCB_CANFA
RS13_PARDE
CUUDP_VERCH
LPP2_HUMAN
UC25_MAIZE
CERB_RAT
LEC3_MACPO
YOAH_KLEABE
GON1_ALLMI
DHE2_THUTH
HTPG_ACICA

Gaps

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A:Cross-references: EMBL:X60853; NID:g50743; PIDN:CAA43243.1; PID:g50744
A:Experimental source: T lymphocyte
C:Keywords: T-cell receptor
                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 15
PH0758
C:Species: Mus musculus (house mouse)
C:Species: Mus musculus (house mouse)
C:Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 05-Nov-1999
C:Accession: PH0758
R:Casanova, J.L.; Romero, P.; Widmann, C.; Kourilsky, P.; Maryanski, J.L.
J. Exp. Med. 174, 1371-1383, 1991
A:Title: T cell receptor genes in a series of class I major histocompatibility complex-rallelic exclusion and antigen-specific repertoire.
A:Reference number: PH0746; MUID:92078846
A:Accession: PH0758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein QA600027 - Arabidopsis thaliana (fragment)
C:Species: Arabidopsis thaliana (mouse-ear cress)
C:Date: 07-Feb-1996 *sequence_revision 19-Apr-1996 *text_change 06-Jun-1997
C:Accession: PT0085
R:Tsugita, A.; Kamo, M.; Kawakami, M.; Ohki, Y.
submitted to JIFID, December 1995
A:Description: Two dimensional electrophoresis of plant proteins and standardization of A:Reference number: PN0173
A:Reference number: PN0173
A:Residues: 1-15 <TSU>
A:Experimental source: leaf
Search completed: December 21, 2000, 08:30:01 Job time: 265 sec
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A; Residues: 1-16 <CAS>
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Best Local Similarity 44.0
Matches 4; Conservative
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Best Local Similarity
Matches 5; Conserv
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4 KGIPTDE 10
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Pred. No. 1.5e+03
2; Mismatches
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Pred. No. 1.4e+03;
1; Mismatches 2
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R:Sjostrom, H.; Friis, S.U.; Noren, O.; Anthonsen, D. Clin. Chim. Acta 207, 227-237, 1992
A:Title: purification and characterisation of antigenic A:Reference number: A56891; MUID:93009000
A:Contents: Kadett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gamma 1 gliadin - wheat (fragment)
C;Species: Triticum sp. (wheat)
C;Date: 00-Dec-1995 #sequence_revision 00-Dec-1995 #text_change 0
C;Accession: A56891
R;Sjostrom, H.; Friis, S.U.; Noren, O.; Anthonsen, D.
Clin. Chim. Acta 207, 227-237, 1992
A;Title: Purification and characterisation of antigenic gliadins
A;Reference number: A56891; MUID:93009000
A;Contents: Kadett
A;Contents: Kadett
                                                                                                                                                                                                                                                                                                gamma 2 gliadin - wheat (fragment)
C;Species: Triticum sp. (wheat)
C;Date: 08-Dec-1995 #sequence_revision
C;Accession: B56891
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A;Pathway: oxidative
C;Keywords: electron
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                                                                                                                                        A; Molecule type: protein A; Residues: 1-15 <SJO> A; Note: sequence extracte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-15 <SJO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: protein
A; Residues: 1-20 <ARN>
A; Experimental source: heart; liver
C; Genetics:
A; Genome: nuclear
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transfer; membrane-associated comp
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66.7%;
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Pred. No. 8.96
2; Mismatches
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Pred. No. 9.
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Pred. No. 9.6e+02;
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A;Molecule type: protein
A;Residues: 1-11 <FRE>
C;Keywords: electron transfer; membrane-associated
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A;Accession: S33867
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R; Fetzner, S.; Lingens, F. Biol. Chem. Hoppe-Seyler 374, A; Title: Microbial metabolism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       quinaldic acid 4-oxidoreductase large chain - Serratia marcescens C:Species: Serratia marcescens C:Date: 02-Dec-1993 #sequence_revision 27-Feb-1997 #text_change 0
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A;Title: Characterization of distinct alpha- and gamma-type gliadins and low molecula A;Reference number: S52124; MUID:95178530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gamma2-gliadin P25-27 - poulard wheat
C:Species: Triticum turgidum (poulard wheat)
C:Date: 14-Jul-1995 #sequence_revision 03-Nov-1995 #text_change 16-Feb-1997
                                                                                                                                                        A; Reference number: S43624; A; Accession: S43626
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R;Freund, R.; Kadenl
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A;Molecule type: protein
A;Residues: 1-18 <ROC>
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R; Rocher, A.; Soriano,
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Pred. No. 1e+03;
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C;Accession: B60278
R;Filis, T.; Costopoulos, C.; Radford, A.J.; Bacic, A.; Wood, P.R.
Infect. Immun. 59, 800-807, 1991
A;Title: Purification and characterization of major antigens from a Mycobacterium bovis
A;Reference number: A60278; MUID:91147217
A;Accession: B60278
                                                                                                                                                         C;Accession: C53113
R;Pike, R.; McGraw, W.; Potempa, J.; Travis, J.
J. Biol. Chem. 269, 406-411, 1994
A;Title: Lysine- and arginine-specific proteinases from Porphyromonas A;Reference number: A53113; MUID:94103245
A;Accession: C53113
                                                                                                                                                                                                                                                                        Lys-gingipain form 2, 17K - Porphyromonas gingivalis (fragment) N:Alternate names: lysine-specific cysteine proteinase 2, 17K C:Species: Porphyromonas gingivalis C:Species: 06-Oct_1994 #sequence_revision 18-Nov-1994 #text_change
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Best Local Similarity
Thes 5; Conserve
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C:Species: Mycobacterium bovis
C:Date: 11-Dec-1992 #sequence_revision 11-Dec-1992 #text_change 18-Jun-1993
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Eur. J. Biochem. 221, 1111-1116, 1994
A;Title: Identification of tissue-specific
A;Reference number: S43624; MUID:94237150
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R;Freund, R; Kadenbach, B.
Eur. J. Biochem. 221, 1111-1116, 1994
                                                            A; Note:
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C;Genetics:
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  Query Match
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Best Local Similarity 50.
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                                                          sequence extracted
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cytochrome-c oxidase (EC 1.9.3.1) chain Vb - bigeye tuna (fragment) C;Species: Thunnus obesus (bigeye tuna) C;Date: 17-Sep-1997 #sequence_revision 17-Sep-1997 #text_change 30-Jan-1998 C;Accession: S77983 R;Arnold, S.; Lee, J.; Kim, M.; Song, E.; Linder, D.; Lottspeich, F.; Kadenl submitted to the Protein Sequence Database, June 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6-phosphofructo-2-kinase (EC 2.7.1.105) / fructose-2,6-bisphosphate 2-phosphatase C;Species: Bos primigenius taurus (cattle) (c;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 31-Mar-2000 C;Accession: I46940 C;Accession: I46940
A; Reference number: S77980
A; Accession: S77983
                                                                                                                                                                                                                                                                                                                                                                                                                                         A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Molecule type: mRNA
A:Residues: 1-20 <SAK>
A:Residues: 1-20 <SAK>
A:Cross-references: GB:S62278; NID:g237973; PIDN:AAB20157.1; PID:g237974
C:Superfamily: 6-phosphofructo-2-kinase / fructose-2,6-bisphosphate 2-phocymords: phosphoric monoester hydrolase; phosphotransferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Biochem. Biophys. Res. Commun. 180, 470-474, 1991
A;Title: Characterization of two isozymic forms of heart fructose 6-phosphate,
A;Reference number: 146940; MUID:92062062
A;Accession: 146940
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C;Date: 04-Mar-1993 #sequence_revision 18-Nov-1994
C;Accession: A41877
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A; Residues: 1-18 <RIM>
A; Note: sequence extra
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                                                                                                                                                                                                                                                                                               8 RGLPTGQAQVAVH
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Pred. No.
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                         182106 seqs, 63460219 residues
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                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd
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           pir1:*
pir2:*
pir3:*
                                                                                                                                                                                                                                                                                                                                  (without alignments)
11.273 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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S-allele-associate	dissimilatory sulf	collagen alpha 1(I urinary tract ston	probable methionin	translation initia	aldose 1-epimerase	lysophospholipase	protein kinase C i	major merozoite su	vespulakinin 1 – e	photosystem II 6.1	T-cell receptor al	T-cell receptor be	T-cell receptor be

ALIGNMENTS

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cytochrome-c oxidase (EC 1.9.3.1) chain Vb-H - trout (fragment)
C:Species: Salmo sp. (trout)
C:Species: 19-Mar-1997 #sequence_revision 01-Aug-1997 #text_change 02-Jul-1998
C:Accession: $43627
R:Freund, R.; Kadenbach, B.
Eur. J. Biochem. 221, 1111-1116, 1994
A:Title: Identification of tissue-specific isoforms for subunits Vb and VIIa
A:Reference number: $43624; MUID:94237150
A:Accession: $43627
                                                                                                                                                                                                                                                                                                           R;Sone, T.; Yamaguchi, T.; Isobe, M.; Takabatake, E.; Adachi, T.; Hirano, K.; Wang, C Chem. Pharm. Bull. 40, 2857-2859, 1992
A;Title: Purification and characterization of hamster hepatic microsomal N,O-acetyltr A;Reference number: PQ0537; MUID:93099627
                                                                                                                                                                                                                                                                                                                                                                                               arylhydroxamic acid N,O-acetyltransferase (EC 2.3.1.-) - golden hamster (fragment) C;Species: Mesocricetus auratus (golden hamster) C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 07-May-1999 C;Accession: PQ0537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-20 <FRES
C;Keywords: electron transfer; membrane-associated complex; oxidoreductase;
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                                                                                                                                                                                                A; Experimental source: liver C; Keywords: acyltransferase
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RNTHTGQVRGLVH 19
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                                                                                     Conservative
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46.2%;
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Pred. No. 4.1e+02;
3; Mismatches 2;
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Pred. No. 4.1e+02;
1; Mismatches 6;
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RESULT 13
US-09-120-365-87
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Best Local Similarity
Watches 5; Conserva
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Sequence 87, Application US/09120365
Patent NO. 6103514
GENERAL INFORMATION:
APPLICANT: Natori, Shunji
TITLE OF INVENTION: NEW PROTEASE
FILE REFERENCE: 32290-144749
CURRENT APPLICATION NUMBER: US/09/120,365
CURRENT FILING DATE: 1998-07-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Duft, Bradford, J.

REGISTRATION NUMBER: 32,219
REFERENCE/DOCKET NUMBER: 193/153
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 100:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 AMINO ACIDS
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PRIOR APPLICATION UMBER: 07/794,288
FILING DATE: 19-NOV-91
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/794,288D
FILING DATE: Herewith
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MEDIUM TYPE: 3.5" Diskette, 1.44
MEDIUM TYPE: Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: LYON & LYON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: NOVEL AMYLIN ANTAGONIST TITLE OF INVENTION: PEPTIDES AND USES THEREFOR NUMBER OF SEQUENCES: 227
                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
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OPERATING SYSTEM: IBM M.S. DOS (Version
OPERATING SYSTEM: 5.0)
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STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION:
                                                                                                                                                                                                                              4 KLSQELHKGTP 14
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633 West Fifth Street,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LAURA S.L. GAETA, KATHRYN S. PRICKETT and
                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LINEAR
                                                                                                                                                                                                                                                                                                                        28.0%;
45.5%;
                                                                                                                                                                                                                                                                                                                      Score 28;
Pred. No.
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; STRANDEDNESS:
; TOPOLOGY: unk
; MOLECULE TYPE:
US-08-463-862-7
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; ORGANISM: Nicotiana
US-09-120-365-87
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Best Local Similarity 50.
Matches 6; Conservative
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                                                                Query Match
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ZIP: 10036-7/1.
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: IBM PC compatible
TOWNITER: IBM PC compatible
TOWNITER: TOWNITER: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/463,862
FILING DATE: 05-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/701,544
FILING DATE: 16-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: Misrock, S. Leslie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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EARLIER FILING DATE: 1997-11-18
NUMBER OF SEQ ID NOS: 101
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 212 790-9090
TELEFAX: 212 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 14
                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 16 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compa
OPERATING SYSTEM: PC-D
SOFTWARE: PATENTIN Rel
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 1155 AVE
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036-2711
                               Local Similarity 60.0 les 6; Conservative
                                                                                                                                                                                                                                                                                                                 NAME: Misrock, S. Leslie
REGISTRATION NUMBER: 18,1
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
2 IFQELSRGLP 11
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1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Boulton,
                                                                                                                                                 unknown
                                                                                                                               peptide
                                                                                                                                                                single
                                                  27.0%;
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50.0%;
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                                                                                                                                                                                                                                                                                                                               18,872
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                                                Score 27; Pred. No.
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Pred. No.
                                  Mismatches
                                                  94;
                                                                DB 1;
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1 IFQETARFQP 10

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US-08-440-861-17

: Sequence 17, Application US/08440861

: Patent No. 5710126
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; FRAGMENT TYPE: internal
US-08-440-861-16
                           APPLICATION NUMBER: US 08/106,016
FILING DATE: 31-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Amy E. Mandragouras
REGISTRATION NUMBER: 1PC-075 (IMI-040cp)
REFERENCE/DOCKET NUMBER: 1PC-075 (IMI-040cp)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEPHONE: (617) 227-5941
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LEWING CHARACTERISTICS:
                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/08/440,861
FILING DATE: 15-MAY-1007
CLASSIFTORM: CURRENT APPLICATION UMBER: US/08/440,861
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Best Local Similarity
Matches 4; Conser
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INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                 CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/106,016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Griffith, Irwin J.
APPLICANT: Kuo, Mei-Chang
APPLICANT: Lugman, Mohammad
TITLE OF INVENTION: T CELL EPITOPES OF RYEGRASS POLLEN
TITLE OF INVENTION: ALLERGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: IP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 31-AUG-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 60 SUCCITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12 IPTGELQI 19
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REGISTRATION NUMBER: 36,207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                ENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NO.
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GY: linear
amino acid
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                  20 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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Best Local Similarity
Watches 5; Conserve
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; FRAGMENT TYPE:
US-08-440-861-17
                                                                                                                                       US-08-726-306A-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-726-306A-31
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Best Local Similarity 50.0
"`~*~hes 4; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                           TELEFAX: (617) 345-911
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 34,380
REFERENCE/DOCKET NUMBER: 96,048-A (3255/00784)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 345-9100
TELEPAX: (617) 345-9111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Burbach, Johannes Peter Henri
APPLICANT: Grosveld, Franklin G.
TITLE OF INVENTION: DIAGNOSIS METHOD AND REAGENTS
NUMBER OF SEQUENCES: 189
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 60/009,832 FILING DATE: 01-Jan-1996 ATTORNEY, AGENT INFORMATION: NAME: Williams, Ph.D., Kathleen Marger Williams, Ph.D., Kathleen Marger Williams, Ph.D., Kathleen Marger Williams, Ph.D., Kathleen M
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: GB 9: FILING DATE: 02-Oct-1995 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/01 FILING DATE: 02-Oct-1996 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                    TOPOLOGY: ur
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12 PTGQSQ 17
                           11 PTGQAQ 16
                                                                                                                                                                             TYPE: amino a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Boston
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
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2 IPTGELQI 9
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                                                           Conservative
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                                                                                                                                                                    unknown
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                                                                                                                                                   peptide
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internal
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                                                        Score 29; DB Pred. No. 54; 1; Mismatches
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Pred. No.
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                                                                                        DB 2;
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                                                      Gaps
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RESULT 12 US-07-794-288D-100

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STRANDEDNESS:
TOPOLOGY: line
MOLECULE TYPE: H
US-08-488-551B-635
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Best Local Similarity
"hehes 6; Conserve
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                                                                                                                                                                                                             RESULT
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GENERAL INFORMATION:
GENERAL INFORMATION:
GAPPLICANT: Wickham, Thomas J.
APPLICANT: Kovesdi, Imre
APPLICANT: Kovesdi, Imre
APPLICANT: Roelvink, Petrus W.
APPLICANT: NOT INVENTION: ADENOVIRAL-MEDIATED CELL TARGETING COMMANDED BY
                                                                                                                                                    Sequence 42, Application US/08634060 Patent No. 5712136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 635, Application US/08488551B Patent No. 6015661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: PM384 (AU)
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: PM4002 (AU)
FILING DATE: 21-FEB-1994
APPLICATION NUMBER: PN0284 (AU)
FILING DATE: 23-DEC-1994
APPLICATION NUMBER: US 08/388,353
FILING DATE: 14-FEB-1995
APPLICATION NUMBER: PN3021/95
FILING DATE: 17-MAX-1995
APPLICATION NUMBER: PN3021/95
APPLICATION NUMBER: NUMBER: NUMBER: NUMBER: NUMBER: NUMBER: NUMBER: NUMBER: NAME: FRANK S. DIGIGLIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (516) 742-436
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 96
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742-4343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT: Dale A. McPhee
APPLICANT: David Cooper
TITLE OF INVENTION: NON-PATHOGENIC STRAINS OF HIV-1
NUMBER OF SEQUENCES: 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/01 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: GARDEN CITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                   7 SRGLPTG 13
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                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ss: single
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein
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85.7%;
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                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                                                         Indels
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Query Match
Best Local Similarity
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; TOPOLOGY: un
; MOLECULE TYPE:
US-08-634-060-42
                                                                                                                                                                                                                                                                                                                                                                                                      US-08-440-861-16
                                                                                                                                                                                                                                                                                                Patent No. 5710126
GENERAL INFORMATION:
APPLICANT: Griffith, Irwin
APPLICANT: Kuo, Mei-Chang
APPLICANT: Lugman, Mohamma
                                                                                                                                                                                                                                                                                                                                                                     Sequence 16, Application US/08440861 Patent No. 5710126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (312) 616-5700
INFORMATION FOR SEQ ID NO: 4
SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Kilyk, John Jr.
NAME: Kilyk, John Jr.
30763
REGISTRATION NUMBER: 30763
REFERENCE/DOCKET NUMBER: 7160
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 106-5600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: LT.
STREET: LT.
CITY: Chicago
CITY: Illinois
TRATE: ISA
              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION UMBER: 08/3
FILING DATE: 08-SEP-1994
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: Leydig, Voit & Mayer, Ltd.
STREET: Two Prudential Plaza, Suite 4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
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OPERATING SYSTEM:
SOFTWARE: PatentI
                                                                                                                                                                      CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/634,060 FILING DATE:
                                                                                                                                                          STATE:
                                                                                                                                                                                           STREET:
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APPLICATION NUMBER: US/08/440,861
                                                                                                                         ZIP: 02109
                                                                                                                                       COUNTRY:
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                                                                                                                                                        Massachusetts
                                                                                                                                                                                         60 State Street, suite 510
                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                 Griffith, Irwin J.
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SYSTEM: PC-DOS/MS-DOS
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55.6%;
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Pred. No. 51;
2; Mismatches
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Best Local S
Matches 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Singh, Mohan Bir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (215) 568-3439
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Ryegrass Pollen Allergen NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lahive & Cockfield
STREET: 60 State Street, Suite 510
CTTV. BOLLEN
               ATTORNEY/AGENT INFORMATION:
NAME: Mandragouras, Amy E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: IM:
                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Hough, Terryn
APPLICANT: Suphioglu, Cenk
APPLICANT: Ong, Eng Kok
TITLE OF INVENTION: Ryegras
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: IMPH-0024
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 14-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: Hohenschutz, Liza D.
REGISTRATION NUMBER: 33,712
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Knox, Robert B.
APPLICANT: Smith, Penelope
APPLICANT: Avjioglu, Asil
APPLICANT: Theerakulpisut, Piyada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07
FILING DATE: 14-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/195,947
FILING DATE: 14-FEB-1994
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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STREET: UL
STREET: BOSTON
WA
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                                                                                   APPLICATION NUMBER: US/08/433,885
FILING DATE: 02-MAY-1995
CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
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SOFTWARE: PatentIn Release #1.0, Version #1.25
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SYSTEM: PC-DOS/MS-DOS
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50.0%;
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               IMI-039C2D2
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                                                                                                                                                              Version #1.25
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Best Local Similarity
A; Conserve
  Query Match
Best Local Similarity
Matches 4; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 30,
                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEPAX: (617) 742-4214
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Rel-
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Lahive & Cockfield, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                    TOPOLOGY: li
                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08
FILING DATE: 02-MAY-1995
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Hough, Terryn
APPLICANT: Suphioglu, Cenk
APPLICANT: Ong, Eng Kok
TITLE OF INVENTION: Ryegrass Pollen Allergen
NUMBER OF SEQUENCES: 53
                                                                                                                                                                                                                 NAME: Mandragouras, Amy E. REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: IM
                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                               LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Boston
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                                                                                                                amino acid
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Knox, Robert B.
Smith, Penelope
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  Conservative
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                                                                                                    linear
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                                                                                     peptide
             29.0%;
50.0%;
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50.0%;
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Score 29; DB 2
Pred. No. 32;
3; Mismatches
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Pred. No.
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                            Length 13;
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Gaps
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RESULT 3
US-08-174-745A-30
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; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-433-854-30
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                                                                       Sequence 30, Application US/08174745A Patent No. 5736362
                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 30, Application US/08433854 Patent No. 5721119
                                                                                                                                                                                                                                                    Matches
                GENERAL INFORMATION:
APPLICANT: Singh, Mohan Bir
APPLICANT: Knox, Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US 07/930,060
APPLICATION NUMBER: US 07/930,060
FILING DATE: 14-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: Hohenschitz, Liza D.
REGISTRATION NUMBER: 33,712
REFERENCE/DOCKET NUMBER: IMPH-0024
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3100
TELEPHONE: (215) 568-3100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Suphiogiu, ...
APPLICANT: Ong, Eng Kok
TITLE OF INVENTION: Ryegrass Pollen Allergen
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSE: Woodcock Washburn Kurtz Mackiewicz & No. 5721119ris
STREET: One Liberty Place - 46th Floor
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (215) 568-3439
:NFORMATION FOR SEQ ID NO: :
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC comparible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/433,854
FILING DATE:
FILING DATE:
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APPLICANT:
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6 IPTGELQI 13
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ZIP: 19103
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5 SRGSPGGQS 13
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Suphioglu, Cenk
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Knox, Robert B.
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                                                                                                                                                                                                                                                                 Score 29;
Pred. No.
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NAME: HODENSCHUTZ, LIZA D.
REGISTRATION NUMBER: 33,712
REFERENCE/DOCKET NUMBER: IMPH
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3100
TELEPAX: (215) 568-3439
INFORMATION FOR SEQ ID NO: 30:
                                                                                                                                                                                                                                                                                                                 Sequence 30, App. Patent No. 58403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                              APPLICANT: Ong, Eng Kok
TITLE OF INVENTION: Ryegrass Pollen Allergen
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5840316ris
STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 14-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5736362ris
STREET: One Liberty Place - 46th Floor
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TITLE OF INVENTION: Ryegrass Pollen Allergen
NUMBER OF SEQUENCES: 53
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CITY: Philadelphia
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GY: linear
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Hough, Terryn
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Knox, Robert B.
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Theerakulpisut,
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Copyright (c) 1993 - 2000 Compugen
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RX MEDLINE; 95140641.
RA Thomson M.C., Macfarlane J.L., Beagley C.T., Wolstenholme D.R.;
RA Thomson M.C., Macfarlane J.L., Beagley C.T., Wolstenholme D.R.;
RA Thomson M.C., Macfarlane J.L., Beagley C.T., Wolstenholme D.R.;
RT Similarity of the encoded protein to fungal and bryophyte group II
RT intron maturases: evidence that mat-r encodes a functional protein.";
RL Nucleic Acids Kes. 22:5745-5752(1994).
REMBL; U09986; AAA67712.1; -.
DR PRAM; PF00166; NADHdh; 1.
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Query Match
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Q1-NOV-1998 (TrEMBLrel. 08, Last annotation update)
Q1-NOV-1998 (TrEMBLrel. 08 Last annotation update)
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Saccharomyces cerevisiae (Baker's yeast).
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Branta 193:99-106(1994).
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01-MAY-2000 (TremBLrel. 13, Last sequence update)
01-JUN-2000 (TremBLrel. 14, Last annotation update)
CYTOCHROME-C REDUCTASE 55 KDA SUBUNIT (EC 1.10.2.2)
   Eukaryota;
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O (TREMBLrel. 13, Last annotation update)
UDP-GLUCOSE GLUCOSYLTRANSFERASE, SGT-19
Viridiplantae;
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INTERPRO; IPRO02040; -
PROSTIE; PS00267; TACHYKININ;
NON_TER
1 1 AA; 1203 MW; E
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EMBL; AF027616; AAD01853.1; -.

EMBL; AF027613; AAD01850.1; -.

EMBL; AF027614; AAD01851.1; -.

EMBL; AF027615; AAD01852.1; -.

INTERPRO: IPR002048; -.
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Q9S739;
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NON_TER 1 1 1
SEQUENCE 20 AA.
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Arabidopsis thaliana (Mouse-ear cress).
Eukaryota, Viridiplantae, Embryophyta; Tracheophyta;
Magnoliophyta; eudicotyledons; Rosidae; eurosids II;
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Q9TQZ5;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
G1YCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE (FRAGMENT).
Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Craniata; Cercopithecidae;
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  cynomolgus (Macaca of two proteins in
          Nicolas M.G., Fujiki K., Murayama K., Suzuki M.T., Mineki R., Hayakawa M., Yoshikawa Y., Cho F., Kanai A.; "Studies on the mechanism of early onset macular degeneration cynomolgus (Macaca fascicularis) monkeys. I. Abnormal concentr of two proteins in the retina.";
                                                                                                                                                                          Cercopithecinae; Macaca.
                                                                                                                       SEQUENCE.
MEDLINE; 96273610.
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Pred. No. 2e+0
3; Mismatches
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Brassicales;
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SEQUENCE
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01-JAN-1998 (TrEMBLrel.
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01-MAY-2000 (TrEMBLrel.
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NON_TER 1 1
SEQUENCE 20 AA; 223
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Bacteria; Proteobacteria; alp
Rickettsiaceae; Rickettsieae;
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Q1-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
THYMIDINE 5'-DIPHOSPHATE D-GLUCOSE 4,6-DEHYDRATASE
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EMBL; U96733; AAB65634.1; ...
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"PCR amplification and comparison of nucleotic
groESL heat shock operon of Ehrlichia species
J. Clin. Microbiol. 35:2087-2092(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE;
                                       Thompson M.W., Strohl W.R., Floss H.G.;
"purification and characterization of TDP-D-glucose
from anthracycline-producing streptomycetes.";
J. Gen. Microbiol. 138:779-786(1992).
SEQUENCE 20 AA; 1943 MW; 7958730238C00AC9 CRC64;
                                                                                                                        Streptomyces peucetius.
Bacteria; Firmicutes; Actinobacteria;
Actinomycetales; Streptomycineae; Str
                                                                                             MEDLINE;
                                                                                                    SEQUENCE.
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nilarity 25.0%;
Conservative
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AA; 1671 MW; 52CCDOD1A98B3DAF CRC64;
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eae; Rickettsia.
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Streptomycetaceae; St
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Q9TWD0;
Q9TWD0;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
SIALOPROTEIN I (FRACHENT).
Sphaerechinus granularis (Purple sea urchin).
Eukaryota; Metazoa; Echinodermata; Echinozoa; Echinoidea;
Eukaryota; Metazoa; Temnopleuroida; Toxopneustidae;
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01-JAN-1998
01-AUG-1998
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POLTER C.A., Baumberg S.;
POLTER (SEP-1997) to the
SUBMILTER (SEP-1997) to the
EMBL; AF026444; AABB2585.1;
SEQUENCE 19 AA; 2080 MW;
Euechinoidea; Echinacea; Sphaerechinus. [1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
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Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales;
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Pred. No. 5.3e
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Tsegenidis T., Antonopoulos T., Antonopoulos C.A.;

Tsegenidis T., Antonopoulos C.A.;

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Q53545;
Q1-NOV-1996
Q1-NOV-1996
Q1-NOV-1998
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OSUAR8;
Ol-MAY-2000 (TrEMBLrel. 13,
Ol-MAY-2000 (TrEMBLrel. 13,
Ol-JUN-2000 (TrEMBLrel. 14,
                                                                                                                                                                                                                              01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
SIALOKININ I PREPROPROFEII (FRAMENT).
Aedes aegypti (Yellowfever mosquito).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Plerygota; Neoptera; Endopterygota; Diptera; Nematocera; Culi
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vasodilator of the Insect Mol. Biol. (
                  STRAIN-ROCKEFELLER/RED; TISSUE-SALIVARY GLAND; STRAIN-ROCKEFELLER/RED; TISSUE-SALIVARY GLAND; Campos Y.A. Beerntsen B.T., Champagne D.E., Coleman J.L., Campos Y.A. "Characterization of the sialokinin I gene encoding the "Characterization of the sialokinin I gene encoding the vasodilator of the yellow fever mosquito, Aedes aegypti.
                                                                                                                                                                                                        Pterygota;
Culicidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nakayama S., Watanabe "Involvement of cpxA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shigella sonnei.
Bacteria; Proteobacteria;
Shigella.
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MEDLINE; 96428846.
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EMBL; S79443;
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SPTREMBL_14:*
1: sp_archea:*
2: sp_bacteria
3: sp_fungi:*
4: sp_human:*
5: sp_inverteb
6: sp_manmal:*
7: sp_mhc:*
10: sp_plage:*
10: sp_plant:
11: sp_rodent:
12: sp_verteb
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Copyright (c) 1993 - 2000
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Compugen Ltd.
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11.880 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

1 2 3 3 4 4 4 5 5 6 6 7 7 7 8 8 9 9 10 11 12 12 13 13 14 15 16 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	Result No.
24 24 25 25 25 25 25 25 25 25 25 25 25 25 25	Score
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o03888 chlorogoniu o3388 chlorogoniu o33045 streptomyce o9tudo sphaerechin o53545 shigella so o9uar8 aedes aegyp o95739 arabidopsis o9tqz5 macaca fasc o34197 rickettsla o9r511 streptomyce o9trq1 bos taurus o9ts403 saccharomyc o9ts807 solanum tub o9s807 solanum tub o295807 solanum tub o295901 vigna sinen o9ucp6 homo sapien o28734 oryctolagus o9prm4 gallus gall	Description

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ALIGNMENTS

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RESULT
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Best Local Similarity
Matches 5; Conserv
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Q95866;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 14, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
TYPE 2 LECTIN (FRACKENT).
Colocasia esculenta (Elephant's ear) (Taro).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta;
Magnoliophyta; Liliopsida; Araceae; Colocasia.
                                                                                                                                                                                                                                                                        SEQUENCE.

SEQUENCE.

SEQUENCE.

Sequence of a lectin from Arum maculatum L.";

Plant Physiol. 107:1147-1158(1995).

SEQUENCE 19 AA; 2066 MW; F9C18865CA58608A CRC64;
            003888;
01-JUL-1997 (TYEMBLYEL. 04, Created)
01-JUL-1997 (TYEMBLYEL. 04, Last sequence update)
01-JUL-1998 (TYEMBLYEL. 08, Last annotation update)
01-HOV-1998 (TYEMBLYEL. 08, Last annotation update)
NADH DEHYDROGENASE (EC 1.6.99.3) (CYTOCHROME C REDUCTASE)
(TYPE I DEHYDROGENASE) (FRAGMENT).
                                                                                            003888
                                                                                                                                                       8 MMLLGQVKYG 17
:: ||| ||
8 LLFSGQVXYG 17
                                                                                                                                                                                                             Conservative
                                                                                            PRELIMINARY;
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pred. No. 2.8e+02;
2; Mismatches
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RESULT 14
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"Homology and distribution of CO dehydrogen
carboxydotrophic bacteria.";
Arch. Microbiol. 152:335-341(1989).
-i- CATALYTIC ACTIVITY: CO + H(2)O + FERRICY
-i- COFACTOR: MOLYBDENUM.
-i- COFACTOR: MOLYBDENUM.
                    ARCD_PSEPU
P41147;
01-FEB-1995
01-FEB-1995
15-JUL-1998
                                                                                                                                                                                                                                                                                                                                            MEDLINE; 9
Kraut M.,
                                                                                                                                                                                                                                                                                                                                                                                                    P19917;
01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
01-DEC-1992 (Rel. 24, Last annotation update)
01-DEC-1992 (Rel. 24, Last annotation update)
CARBON MONOXIDE DEHYDROGENASE MEDIUM CHAIN (EC 1.2.99.2)
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STRAIN=OM5;
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                                                                                                                                                                                                                                                                                                 carboxydotrophic bacteria.";
Arch. Microbiol. 152:335-341(1989).
-i- CATALYTIC ACTIVITY: CO + H(2)O + ACCEPTOR
                                                                                                                                                                                                                                                PIR;
                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                     Bacteria; Proteobacteria.
        01-FEB-1995 (Rel. 31, Created)
01-FEB-1995 (Rel. 31, Last sequence update)
15-JUL-1998 (Rel. 36, Last annotation updat
ARGININE/ORNITHINE ANTIPORTER (FRAGMENT).
                                                                         PSEPU
                                                                                                                                                                                                                           Oxidoreductase; Molybdenum.
                                                                                                                                                                                                                                                                                                                                                                                                Pseudomonas carboxydohydrogena.
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                                                                                                                                                                                                                SEQUENCE
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                                                                                                                                                           Local Similarity
tes 4; Conserv
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                                                                                                                                                                                                                                                                    COFACTOR: MOLYBDENUM.
SUBUNIT: CONSISTS OF
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                                                                                                                                       MMLLGQVKY 16
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                                                                                                                                                                                                                                                                                                                                              Hugendieck I.,
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                                                               STANDARD;
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44.4%;
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44.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 20; DB
Pred. No. 2.1e
1; Mismatches
                                                                                                                                                            Score 20;
Pred. No.
1; Mismatc
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O dehydrogenase structural genes in
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Search completed:
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                use by non-profit institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.

STRAIN-ATCC 4359;

Wilson S.D., Wang M., Filpula D.;

Submitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.

-i- FUNCTION: CATALYZES AN ELECTRONEUTRAL EXCHANCE BETWEEN AR AND ORNITHINE TO ALLOW HIGH-EFFICIENCY ENERGY CONVERSION ARGININE DEIMINASE PATHWAY.

-i- SUBCELLULAR LOCATION: INTEGRAL MEMBRANE PROTEIN. INNER ME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN the European Bioinformatics Institute. There are no restrained to the company of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pseudomonas putida.
Bacteria; Proteobacteria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Transport;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL;
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SIMILARITY:
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                                                                                                                                                                                                                    YGLHN 20
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3; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Amino-acid transport;
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                                      December
                                                                                                                                                                                                                                                                                                                                                                                                                                  AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     1644 MW;
                                                                                                                                                                                                                                                                                                              19.2%;
                                      21,
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                                   2000, 08:32:59
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                                                                                                                                                                                                                                                                                                           Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                     90B48A7C8FAA9705 CRC64;
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                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Transmembrane; Inner membrane
                                                                                                                                                                                                                                                                                                                                                  DB
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30-MAY-2000 (
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P56917;
30-MAY-2000
30-MAY-2000
30-MAY-2000
                                                                                  Amphibian
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rana temporaria (European common frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea;
                                                                                                                                                                                                "Temporins, antimicrobial peptides temporaria.";
                                                                                                                                                                                                                             Barra D.
                                                                                                                                                                                                                                       Simmaco M., Mignogna
                                                                                                                                                                                                                                                        MEDLINE;
                                                                                                                                                                                                                                                                    TISSUE-SKIN;
                                                                                                                                                                                                                                                                                                          Rana temporaria (European common frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                         RANTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amphibian skin; Antibiotic; MOD_RES 14 14 SEQUENCE 14 AA; 1469 MW;
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                                                                                                                                                                                                                                                                                     SEQUENCE
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                                                                                                                          SUBCELLULAR LOCATION: S
SIMILARITY: BELONGS TO
                                                                                                                                                  FUNCTION: HAS ANTIBACTERIAL ACTIVITY AGAINST GRAM-NEGATIVE GRAM-POSITIVE BACTERIA.
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4; Conser
              Similarity
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                                                                                                skin; Antibiotic;
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S ANTIBACTERIAL ACTIVITY
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39,
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           20.2%;
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                                                                                              Amidation; Multigene
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Score 21; DB Pred. No. 1.363; Mismatches
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Pred. No. 1.3e
3; Mismatches
                                                                     4D1653612B9DECC3 CRC64;
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601653612B9DECD4 CRC64;
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1.3e+03;
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Ranidae; Rana
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Matches 5
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Ehrlich R.S., Colman R.F.;

Ehrlich R.S., Colman R.F.;

Characterization of an active site peptide me "Characterization of an aloque 3-bromo-2-ketoglutarate on a single analogue 3-bromo-2-ketoglutarate on a single dependent isocitrate dehydrogenase.";

dependent isocitrate dehydrogenase.";

T Riol. Chem. 262:12614-12619(1987).
                                                                                                                                                   DCMM_PSECA STANDARD; PRT; 15 AA P19920; P19920; O1-FEB-1991 (Rel. 17, Created) O1-FEB-1991 (Rel. 17, Last sequence update) O1-JUN-1994 (Rel. 29, Last annotation updat CARBON MONOXIDE OXYGENASE (CYTOCHROME B-561
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                         Pseudomonas carboxydovorans.
Bacteria; Proteobacteria; alpha subdivision; Rhizoblaceae
Bradyrhizobium group; Oligotropha.
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INTERPRO; IPRO01804; -
PROSITE; PS00470; IDH_IMDH; PARTIAL.
Oxidoreductase; NADP; Tricarboxylic
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01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
1SOCITRATE DEHYDROGENASE [NADP] CYTOPLASMIC (EC 1.1.1.42)
(OXALOSUCCINATE DECARBOXYLASE) (IDH) (NADP+-SPECIFIC ICDH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2',5'-biphosphate in dehydrogenase.";
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Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                 (FRAGMENT)
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les 5; Conserv
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Pred. No. 1.5e
3; Mismatches
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B-561]
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01-AUG-1990 (Rel. 15, Last sequence update)
01-AUG-1990 (Rel. 15, Last sequence update)
01-AUG-1990 (Rel. 15, Last annotation update)
HISTAMINE RELEASING PEPTIDE II (HR-II).
Vespa orientalis (Oriental hornet).
Vespa orientalis (Ariental hornet).
Fukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata;
Vespoidea; Vespidae; Vespinae; Vespa.
                                                                                                                Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Miroshnikov A.I., Snezhkova L.G., Nazim
Rozynov B.V., Gushchin I.S.;
"Structure and properties of histamine
venom of Vespa orientalis hornet.";
Bioorg. Khim. 7:1467-1477(1981).
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SEQUENCE
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p36231;
01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
01-JUN-1994 (Rel. 29, Last annotation update)
01-JUN-1994 (Rel. 29, Last sequence update)
N-ACETYL-D-GALACTOSAMINE_BINDING LECTIN SUBUNIT
BINDING LECTIN SUBUNIT B) (FRAGMENT).
Iris hollandica (Dutch iris).
Iris hollandica (Dutch iris).
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MOD_RES 14 14 AMIDATION.

SEQUENCE 14 AA; 1524 MW; 22015B4A6CEDFD38
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"Isolation and characterization of an

"Isolation and characterization of an

"cecetyl-D-galactosamine-binding lectin from Dutch Iris
recognizes the blood group A disaccharide (GalNAc alpha
J. Biol. Chem. 269:7666-7673(1994).

I FUNCTION: GAL / GALNAC-SPECIFIC LECTIN. AGGLUTINATES
AND TRYPSIN-TREATED RABBIT ERYTHROCYTES BUT NOT HUMA

AND TRYPSIN-TREATED RABBIT ERYTHROCYTES BUT NOT HUMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-CV. GOLDEN HARVEST, AND CV. PROF. BLAAUW; TISSUE-BULB; MEDLINE; 94171801.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Asparagales; Iridaceae; Iris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE.
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SUBUNIT: DISULFIDE-LINKED HETERODIMER
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4; Conser
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Pred. No. 9e+0
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1.3e+03;
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BUT NOT HUMAN
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ACCURACTOR OF THE SQUARE SQUAR
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Best Local
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P81819;
30-MAY-2000 (Rel. 3
30-MAY-2000 (Rel. 3
30-MAY-2000 (Rel. 3
CARCINUSTATIN 16
                                                                                                          Query Match
Best Local Similarity
                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Isolation and identification of multiple neuropeptides allatostatin superfamily in the shore crab Carcinus maen Eur. J. Biochem. 250:727-734(1997).

Eur. J. Biochem. 250:727-734(1997).

-i - FUNCTION: MAY ACT AS A NEUROTRANSMITTER OR NEUROMODDU -: FUNCTION: MELONGS TO THE ALLATOSTATIN FAMILY.

Neuropeptide; Amidation; Multigene family.

NOD_RES

8

AMIDATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Carcinus maenas (Common shore crab) (Green crab).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura;
Eubrachyura; Portunoidea; Portunidae; Carcinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CARMA
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01-AUG-1990 (Rel. 15, Last sequence upd
15-DEC-1998 (Rel. 37, Last annotation u
VESPID CHEMOTACTIC PEPTIDE T (VESCP-T).
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01-AUG-1990
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                                                                                                                                                                                             Mast cell degranulation;

MOD_RES 13 13

SEQUENCE 13 AA; 1354 M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vespa tropica (Hornet)
Eukaryota; Metazoa; Ar
                                                                                                                                                                                                                                                                                       Osaka (1983).
-!- FUNCTION: MAST CELL DEGRANULATING PEPTIDE.
                                                                                                                                                                                                                                                                                                                            Yasuhara T., Nakajima T.,
(In) Sakakibara S. (eds.);
Peptide chemistry 1982, pp
                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-VENOM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Neoptera; Endopterygota; Hymenoptera; Apocrita; Ac
Vespidae; Vespinae; Vespa.
                                                                                                                                                                                                  13 AA; 1354 MW;
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No.
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1.2e+03;
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RESULT 4
MDH_MICGL
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AC 01-FE
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Best Local S
Matches 3
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Best Local Similarity
Matches 4; Conser
P19979;
P19979;
O1-FEB-1991 (Rel. 17, Created)
O1-FEB-1991 (Rel. 17, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation updat
MALATE DEHYDROGENASE (EC 1.1.1.37) (FRAGMEN
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P19978;
                                                                              MDH_MICGL
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Oxidoreductase; Tricarboxylic acid
NON_TER 20 20
SEQUENCE 20 AA: 1989 MW; 79587E
                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 89374824.

Rommel T.O., Hund H.-K., Speth A.R., Lingens F.;

"Purification and N-terminal amino-acid sequences of bacterial dehydrogenases from six actinomycetales strains and from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
30-WAY-2000 (Rel. 39, Last annotation update)
MALATE DEHYDROGENASE (EC 1.1.1.37) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                    Phenylobacterium immobile, strain E.",
Biol. Chem. Hoppe-Seyler 370:763-768 (1989).
-!- CATALYTIC ACTIVITY: L-MALATE + NAD(+) -
-!- SIMILARITY: BELONGS TO THE LDH FAMILY. N
PIR, S04961; S04961.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Transferase; Pentose shunt.
NON_TER 1 1
NON_TER 9 9
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Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Actinomycetales; Pseudonocardineae; Pseudonocardiaceae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | YGLH 19
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                                                                                                                                         GQIGYAL 20
                                                                                                                                                                GQVKYGL 18
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3; Conserv
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                                                                                                                                                                                       Conservative
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1033
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75.0%;
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57.1%;
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Pred.
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No.
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                      on update)
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8.8e+04;
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OSE 6-PHOSPHATE.
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RAL1_CARMA STANDARD; PRT; 9 AA
PB1814;
30-MAY-2000 (Rel. 39, Created)
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CARCINUSTATIN 11.
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-i- FUNCTION: MAY ACT AS A NEUROTRANSMITTER
-i- SIMILARITY: BELONGS TO THE ALLATOSTATIN
Neuropeptide; Amidation; Multigene family.
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AMIDATION.
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Microtetraspora glauca.
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Bacteria; Firmicutes; Actinobacteria; Streptosporangiaceae;
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ALIGNMENTS

RESULT 1
AL17_CARMA STANDARD; PRT; 8 AA.
ID AL17_CARMA STANDARD; PRT; 8 AA.
ID AL17_CARMA STANDARD; PRT; 8 AA.
AC P81820;
DT 30-MAY-2000 (Rel. 39, Created)
DT 30-MAY-2000 (Rel. 39, Last sequence update)
DT 30-MAY-2000 (Rel. 39, Last annotation update)
DT 30-MAY-2000 (Rel. 39, Last annotation update)
DT 30-MAY-2000 (Rel. 39, Last annotation update)
DC CARCINUSTATIN 17.
OS Carcinus maenas (Common shore crab) (Green crab).
OS Carcinus maenas (Common shore crab) (Green crab).
OS Carcinus maenas (Common shore crab) (Green crab).
OC Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
CC Eukaryota; Metazoa; Arthropoda; Pleocyemata; Brachyura;
OC Eubarachyura; Portunoidea; Portunidae; Carcinus. SEQUENCE.
SEQUENCE.
TISSUE=CEREBRAL GANGLION, AND THORACLE CO.
TISSUE=CEREBRAL GANGLION, AND THORACLE CO.
TISSUE CEREBRAL GANGLION, AND THORACLE CEREBRAL CERE Jaros P.P.,

-i- FUNCTION: MAY ACT AS A NEUROTRANSMITTER OR NEUROMODULATOR.
-i- SIMILARITY: BELONGS TO THE ALLATOSTATIN FAMILY.

Neuropeptide; Amidation; Multigene family:
MOD_RES
8
AMIDATION (POTENTIAL).
SEQUENCE 8 AA; 858 MW; C82879D5AB46D865 CRC64; l Similarity 4; Conserv Conservative 22.1%; Score 23; DB 1; Pred. No. 8.8e+04; 1; Mismatches Length Indels 8 0; Gaps 0

TAL3_PICJA STANDARD; PRT; 9 AA. P17441; 01-AUG-1990 (Rel. 15, Created) 01-AUG-1990 (Rel. 15, Last sequence update) 01-FEB-1994 (Rel. 28, Last annotation update) TRANSALDOLASE III (EC 2-2.1.2) (FRAGMENT). Pichia jadinii (Yeast) (Candida utilis). Pukaryota; Fungi; Ascomycota; Saccharomycetes SEQUENCE.

MEDLINE; 75145197.

TSOLAS O., Sun S.C.;

TSOLATIOn of a peptide containing a histidinyl-cysteinyl sequence from the active center of transaldolase.";

Arch. Biochem. Biophys. 167:525-533(1975).

-!- FUNCTION: TRANSALDOLASE IS IMPORTANT FOR THE BALANCE OF Saccharomycetaceae; Pichia. 12 GQVKYGL 18 8 Saccharomycetes; 9 Ą Saccharomycetales;

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DNA-invertase - phage Mu (fragment)
C;Species: phage Mu
C;Species: phage Mu
C;Date: 01-Dec-1989 #sequence_revision 01-Dec-1989 #text_charge 16-Feb-1997
C;Accession: $02455
R;Klippel, A.; Mertens, G.; Patschinsky, T.; Kahmann, R.
EMBO J. 7, 129-1337, 1988
A;Title: The DNA invertase Gin of phage Mu: formation of a covalent complex with DNA via A;Reference number: $02455; MUID:88296429
A;Accession: $02455
A;Status: not compared with conceptual translation
A;Molecule type: DNA
A;Residues: 1-16 <KLI>
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C;Species: Mus musculus (house mouse)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 07-May-1999
C;Accession: A49887
R;Sasaki, H.: Hogan, B.L.M.
Cell 76, 103-115, 1994
A;Title: HNF-3beta as a regulator of floor plate development.
A;Reference number: A49887; MUID:94116056
A;Accession: A49887
A;Status: preliminary
Search completed: December 21, 2000, 08:30:07 Job time: 271 sec
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A;Gene: gin
C;Keywords: DNA binding
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A;Residues: 1-15 <SAS>
C;Keywords: alternative initiators; alternative splicing; transcription factor
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C; Keywords: oxidoreductase; tricarboxylic acid cycle

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A; Note:
C; Keywor
histamine-releasing peptide II - oriental hornet N;Alternate names: venom protein HR-2 C;Species: Vespa orientalis (oriental hornet) C;Date: 15-Jan-1993 #sequence_revision 15-Jan-1993 C;Accession: JN0390; S10919 C;Miroshnikov, A.I.; Snezhkova, L.G.; Nazimov, I.V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
A; Residues: 1-20 <WAS>
C; Keywords: heterotetr
                                                                                                                                                                                                                                                                                                                                                              A;Title: Predominance of fetal type DJH joining in young children with B precursor lympl A;Reference number: PH1302; MUID:93094761 A;Accession: PH1338
                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change
C;Accession: PH1338
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A;Accession: B44835
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Streptomyces peucetius
C;Date: 20-Sep-1999 #sequence_revision
C;Accession: B44835
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Best Local
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Best Local
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rds: carbon-oxygen lyase; hydro-lyase
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 L.G.; Nazimov, I.V.; Reshetova, O.I.; Rozinov,
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Pred. No. 1.8e+03;
'wismatches 2;
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Pred. No. 1.8e+03;
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Pred. No. 1.8e+03;
5; Mismatches 2;
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                                #text_change 23-Aug-1997
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Query Match
Best Local Similarity
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A;Reference number: JN0389
A;Accession: JN0390
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PH0797
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A; Residues: 1-14 <KIM>
C; Keywords: oxidoreductase
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R;Kim, S.T.; Huh, W.K.; Kim, J.Y.; Hwang, S.W.; Kang, S.O.
Biochim. Biophys. Acta 1297, 1-8, 1996
Biochim. Biophys. Acta 1297, 1-8, 1996
A;Title: D-arabinose dehydrogenase and biosynthesis of erythroascorbic acid in A;Reference number: S72217; MUID:96439039
A;Accession: S72217
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S72217
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C;Keywords: amidated carboxyl end; venom
F;14/Modified site: amidated carboxyl end (Leu) #status experimental
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A;Title: Low-molecular weight peptides of venom of the giant hornet Vespa orientalis. A;Reference number: S06445
A;Accession: S10919
A; Experimental source: T ly C; Keywords: T-cell receptor
                                                                      A; Molecule type: mRNA
A; Residues: 1-15 < CAS>
                                                                                                                     A; Reference number: PH0746; A; Accession: PH0797
                                                                                                                                            A; Title: T cell receptor genes in a series of class I major allelic exclusion and antigen-specific repertoire.
A; Reference number: PH0746; MUID:92078846
                                                                                                                                                                                                                  R;Casanova, J.L.; Romero, P.; Widmann, C.; J. Exp. Med. 174, 1371-1383, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: protein A; Residues: 1-14 <MIR>
                                               A; Cross-references: EMBL: X60903
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Matches
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Local Similarity 40.0%;
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Pred. No. 1.8e+03;
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21.2%;

Score Pred.

No.

DB 2; 2e+03;

Length 15;

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A; Molecule type: protein A; Residues: 1-9 <TSO> C; Keywords: transferase
                                                                                                                        C;Accession: A11497
R;Tsolas, O.; Sun, S.C.
Arch. Biochem. Biophys. 167, 525-533, 1975
A;Title: Isolation of a peptide containing a histidinyl-cysteinyl A;Reference number: A11497; MUID:75145197
A;Accession: A11497
                                                                                                                                                                                                                         transaldolase (EC 2.2.1.2) III - yeast (Pichia jadinii) (fragment) C:Species: Pichia jadinii, Candida utilis C:Date: 05-Jun-1987 #sequence_revision 05-Jun-1987 #text_change 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T-cell receptor beta chain (clone 223/5) - mouse (fragment)
C;Specles: Mus musculus (house mouse)
C;Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 11-Apr-1995
C;Accession: PH1475
R;Casanova, J.L.; Martinon, F.; Gournier, H.; Barra, C.; Pannetier, C.; Reg.
J. Exp. Med. 177, 811-820, 1993
A;Title: T cell receptor selection by and recognition of two class I major la;Reference number: PH1430; MUID:93171821
A;Accession: PH1475
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A; Accession: PC4213
A; Molecule type: DNA
A; Residues: 1-15 <SYL>
A; Cross-references: GB:U47637; NID:g1245151; PIDN:AAC44530.1; PID:g1245156
A; Experimental source: strain B-356
C; Genetics:
A; Gene: bphB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Experimental source: cytolytic T-lymphocyte C; Superfamily: immunoglobulin homology C; Keywords: receptor; T-cell
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A; Residues: 1-16 <CAS>
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Matches 4; Conservative
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Pred.
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Pred. No. 9.8e+02;
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9.1e+02;
3;
DB 2;
1.8e+05;
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              Length 9;
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C;Accession: S04961
R;Rommel, T.O.; Hund, H.K.; Speth, A.R.; Lingens, F.
Biol. Chem. Hoppe-Seyler 370, 763-768, 1989
A;Title: Purification and N-terminal amino-acid sequences of bacterial malate dehydro A;Reference number: S04956; MUID:89374824
A;Accession: S04961
A;Mccession: S04961
A;Residues: 1-20 <ROM>
C;Superfamily: L-lactate dehydrogenase
C;Keywords: oxidoreductase; tricarboxylic acid cycle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   malate dehydrogenase (EC 1.1.1.37) - Kibdelosporangium aridum (fragment)
C;Species: Kibdelosporangium aridum
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 02-Aug-1994
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S04961
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A;Title: 4-Hydroxy-2-nonenal cytotoxicity in renal A;Reference number: S74147; MUID:96404942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  glyceraldehyde-3-phosphate dehydrogenase (EC 1.2.1.12) - pig (fragment) C;Species: Sus scrofa domestica (domestic pig) C;Date: 11-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 07-May-C;Accession: S74147
                                                                                                                                                                                                                   S04958
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Pred. No. 8.7e+02;
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length: 20
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104
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pir1:*
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11.273 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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octamer-binding pr	protein QF200076 -	ribosomal protein	o o	group III allergen	T-cell receptor al	T-cell receptor al	T-cell receptor al	Ig H chain V-D-J r	neuropeptide pep -	carbon-monoxide de	Ig heavy chain V r	Ig heavy chain DJ	hypothetical prote	T cell receptor al	tetrahydroberberin

ALIGNMENTS

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hypothetical protein TCR delta [imported] - human (fragment)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change 20-Jun-2000
C;Accession: 152623
R;Przybylski, G; Oettle, H.; Ludwig, W.D.; Siegert, W.; Schmidt, C.A.
Br. J. Haematol. 87, 301-307, 1994
A;Title: Molecular characterization of illegitimate TCR delta gene rearrangements in A;Reference number: 152623; MOID:95034253
A;Accession: 152623
                                                                                                                                                                                                                                                 methionine adenosyltransferase (EC 2.5.1.6) 2 - fungus (Fusarium sporotrichioides) (f C;Species: Fusarium sporotrichioides C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 05-May-2000 C;Accession: PA0091 R;Chow, L.P.; Fukaya, N.; Sugiura, Y.; Ueno, Y.; Tabuchi, K.; Tsugita, A. submitted to JIPID, October 1994 A;Reference number: PA0051 A;Accession: PA0091
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PA0091
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A;Residues: 1-15 <CHO>
C;Keywords: S-adenosylmethionine; transferase
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Watches 7; Conserve
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A;Gene: TCRdelta
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A;Molecule type: DNA
A;Residues: 1-18 <RES>
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                                                                              Query Match
Best Local Similarity 60.0
Matches 6; Conservative
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1 TYEKALEQLG
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Pred. No. 9.1e+02;
1; Mismatches 3
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Pred. No. 5.1e+02;
1; Mismatches 1
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CC uraemia, diabetes, Cushing's syndrome, cachexias, eating disorders, AIDS, CC after stress and during neuromuscular disease.

XX SQ Sequence 12 AA;

Query Match 27.9%; Score 31; DB 20; Length 12; Best Local Similarity 60.0%; Pred. No. 70; Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0; Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0; Length 12; Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0; Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0; Length 12; Length 12; Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0; Length 12; Len
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Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnostically, e.g. to measure serum HDL (particularly its subpopulation involved in retrograde cholesterol transport) and for imaging the circulatory system or HDL accumulations at fatty streaks. The present sequence represents a peptide from the present invention.
           The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 15-29 residue peptide, or analog, that forms an amphipathic alpha-hellx in presence of lipids. (A), and their lipid
                                                                                                      Claim 19;
                                                                                                                                                                                           WPI; 1999-277035/23
                                                                                                                                                                                                                                    Buttner K,
Sekul R;
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7; Conserv
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associated
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RESULT
Y32796
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This sequence is a polypeptide from the mammalian prolactin receptor. Sequences (Y32794-Y32823) are examples of polypeptide sequences found at or near the ubiquitin/proteosome complex binding site located on the intracellular part of a cell surface receptor. These sequences are used in a method for controlling the availability and signal transduction capability of a cell surface receptor by administering an inhibitor that is capable of inhibiting proteolytic cleavage of the receptors being present on of this proteolytic cleavage results in the receptors being present on the surface for longer and therefore signalling for longer to the interior of the cell. This increases the sensitivity of cells to any hormones which might be present. The inhibitor is either derived from, competes with or binds to a polypeptide sequence of which sequences y32794-Y32823 are examples. The inhibitor may be used to treat muscle wasting, associated with disorders such as renal tubular defects,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. Y19188 to Y19441 represent lecithin:cholesterol acyltransferase (LCAT) activity
                                                                                                                                                                                                                                                                                                              Controlling the availability and/or signal transduction capability of a cell surface receptor, useful for treating growth hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Signal transduction; proteolytic proteosome binding site; muscle
                                                                                                                                                                                                                                                                 Disclosure; Page 9; 36pp; English.
                                                                                                                                                                                                                                                                                                       deficiencies
                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-510568/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EP943624-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oryctolagus cuniculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mammalian prolactin receptor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Y32796;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Y32796 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                           12-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diabetes; Cushing's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       exhibiting
                                                                                                                                                                                                                                                                                                                                                                                                         (UYUT-) RIJKSUNIV UTRECHT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11 EHLLVDFLQSLS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       core peptides, which are apoA-I agonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                           98EP-0200799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                deficiency; inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98EP-0200799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             proteolytic cleavage; prolactin receptor; ite; muscle wasting; renal tubular defect; disease; eating disorder; AIDS; ubiquitin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       58
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  derived polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB
94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cardiovascular disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   uraemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 15-29 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. Y18934 to Y19187 represent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists.
                                                                                                                                                                                                                                                                                                     Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human; lecithin:cholesterol acyltransferase; LCAT; hypercholesterolaemia; cardiovascular disease; atherosclerosis; restenosis; HDL; apoA-I;
                                                                (CORN/)
(DASS/)
(METZ/)
                                                                                                                                                                                                                                                                                                                                                                                        09-JUL-1999
                                                                                                                                 29-SEP-1997;
                                                                                                                                                          28-SEP-1998;
                                                                                                                                                                                     08-APR-1999
                                                                                                                                                                                                              WO9916408-A2
                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                               septic
                                                                                                                                                                                                                                                                                         cardiovascular disease; atherosclerosis; restenosis; HDL; apoA-I;
high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                                                                                                                                                                                               Apolipoprotein A-I;
                                                                                                                                                                                                                                                                                                                                                        Lecithin: cholesterol acyltransferase activation exhibiting peptide #133.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Y18812 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-277034/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Buttner K, Cornut I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (METZ/) METZ G.
(SEKU/) SEKUL R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 EHLLVDFLQSLS 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 erlledllqaln 18
1999-277031/23
                                                                                                                                                                                                                                       sapiens
                                                                          DASSEUX J.
                                                                                                                                                                                                                                                                               shock
                                                   METZ G.
SEKUL R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agonists of apolipoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 114; 254pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22
                        Cornut I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA;
                                                                                                                                  97US-0940093
                                                                                                                                                           98WO-US20328
                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dasseux J,
                          Dasseux J,
                                                                                                                                                                                                                                                                                                                                                                                                                                          A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                        Metz G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A-I
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                        Sekul
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Best Local
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                                                                                                                                                                                                                                                                                                                                        (BUTT/)
(CORN/)
(DASS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. Y18680 to Y18933 represent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gene therapy; apolipoprotein A-I; agonist; dyslipidemic disorder; ApoA-I; cardiovascular disease; atherosclerosis; restenosis; LCAT; hyperlipidemia; septic shock; lecithin:cholesterol acyltransferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 14-22 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I afficiency because the strict of the stric of the strict of the strict of the strict of the strict of the 
                                          Claim 18; Page 166; 232pp; English
                                                                                     Nucleic acid encoding apolipoprotein A-I agonist peptides
                                                                                                                                            WPI; 1999-254921/21
                                                                                                                                                                                            Buttner K,
Sekul R;
                                                                                                                                                                                                                                                                                           (DUFO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-APR-1999
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                                                                                                                                                                                                                                                                    (SEKU/)
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                                                                                                                                                                                                                                                                                                             BUTTNER K.
CORNUT I.
DASSEUX J.
DUFOURCO J.
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                                                                                                                                                                                                                                                                  SEKUL R.
                                                                                                                                                                                                                                                                                           METZ G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22 AA;
                                                                                                                                                                                                                  Cornut I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                     97US-0940136
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                                                                                                                                                                                                                  Dasseux J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 32;
Pred. No.
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                                                                                                                                                                                                                  Dufourcq
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                                                                                                                                                                                                                J,
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The present invention describes a nucleic acid (A) encoding an

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Kyaw H, Lafleur DW, MOUIC.
Kyaw H, Shi Y, Soppet DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           as compared to the human protein only.

The invention relates to 125 novel genes and their fragments (nucleic acid sequences: X84933-X85057; amino acid sequences Y27567-Y27933) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polypeptides in a sample or by determining the presence of mutations in the new polypucleotides, based on which tissues they are most highly expressed in (see X84933 for described
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-NOV-1997;
17-NOV-1997;
17-NOV-1997;
17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                             microbial surface components recognising adhesive matrix molecule; MSCRAMM; fibronectin; fibronectin-binding protein; antibody; epitope; antibiotic; bacterial infection; antibiotic-resistant strain.
                                                                                                                                                                                                                                                                                     Synthetic. Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This sequence represents a secreted human protein encoded by the gene clone detailed in the descriptor line. The gene can be used to generate fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. X84924) for increasing the stability of the fused protein
                      (TEXA ) UNIV TEXAS A & M SYSTEM
                                                                          21-JAN-1997;
                                                                                                                            21-JAN-1998;
                                                                                                                                                                                 23-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fibronectin binding protein-derived peptide #34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W65690 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New human secreted proteins and coding sequences useful for treating disorders of the immune system and hyperproliferative disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; X85016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-337740/28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 PEHLLVDFLOSLS 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 119; 507pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0066090.
97US-0066094.
97US-0066095.
97US-0066089.
                                                                          97us-0036139
                                                                                                                            98WO-US01222
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61.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Endress GA, F
Moore PA, Ni
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 33;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GA, Feng
A, Ni J,
Wei Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           red. No. 40;
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P, Janat
Olsen HS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
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(BUTT/) BUTTNER K. (CORN/) CORNUT I. (DASS/) DASSEUX J.

28-SEP-1998; 08-APR-1999

29-SEP-1997;

97US-0940096 98WO-US20326

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RESULT 11
Y19066
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Best Local Similarity
Whiches 6; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to antibodies that bind to a fibronectin-binding chomain of a fibronectin-binding protein, and inhibit binding of the protein to fibronectin. Also claimed are: (1) isolated peptides of a CC fibronectin-binding protein that do not bind to fibronectin; (2) fusion protein containing at least one peptide of a fibronectin-binding protein cCC linked to a second amino acid sequence; (3) nucleic acid encoding cCC linked to a second amino acid sequence; (3) nucleic acid encoding cCC the isolated peptide of (1). Antibodies, the isolated peptides of cCC passive) and (by inhibiting binding of bacteria to fibronectin) for cCC passive) and (by inhibiting binding of bacteria to fibronectin) for CCC preventing or treating infection in humans or other animals, particularly by staphylococci or streptococci, e.g. meningitis, otitis media, cCC others. Since the antibodies block binding of bacteria, they should be cfective against antibiotic-resistant strains, and may replace cCC effective against antibiotic-resistant strains, and may replace cCC antibiotic therapy or increase its effectiveness. Sequences W65670-90 CCC represent a series of synthetic peptides based on the D3 repoat of cCC aureus fibronectin binding protein A. They were synthesised to contain and contain a proline residue at each position throught the sequence (ie a proline contain contain contain contain and contain contain contain and contain and contain contain contain and contain contain contain and contain contain and con
                                                                                                                                                                                                                                                                                                                                          human; lecithin:cholesterol acyltransferase; cardiovascular disease; atherosclerosis; res high density lipoprotein; hypertriglyceridem
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Speziale P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antibody that binds to fibronectin-binding protein, preventing binding to fibronectin - used to treat or prevent bacterial infection, especially by Staphylococci and Streptococci
                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Y19066;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Y19066 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                 WO9916458-A1
                                                                                                                                                                                                                                                                                                                             septic shock
                                                                                                                                                                                                                                                                                                                                                                                                           Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lecithin:cholesterol acyltransferase activation exhibiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; Page 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1998-413816/35
                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 yqfpphnsvdf 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 32;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ed. No. 90;
Mismatches
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                                                                                                                                                                                                                                                                                                                                                               restenosis; HDL; apoA-I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    peptide #133.
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA unit having a nucleotide sequence which encodes it. Fref. the AA sequence consists of alpha and beta interferons. Pref. If is AA sequence consists of huIRN-alpha-1 (and IF2 is the 74-166 AA seq. (i) the 1-73 AA seq. of HuIRN-beta-1) (see will55, p30222); or (ii) the 1-41 AA seq. of of HuIRN-beta-1) (see will56, as 166 AA seq. of HuIRN-beta-1) (see N30160, p30227). Alternativeley IF1 is the amino terminal end of a beta-IF and IF2 is the carboxy terminal of an alpha-IF (esp. the beta-IF and IF2 is the carboxy terminal of an alpha-IF (esp. the 1-73 seq. of HuIRN-beta-1 and the 74-167 seq. of HuIRN-alpha-1 resp.) (see N30156, p30223). In the examples plasmids pwW5 and pMM101/trp/beta-1 and p-alpha-61A were used (see N30151, N30152, N30157). HinfI was used to digest the DNA sequences in the region of significant handicaps (see N30133, N30154, N30158), and the restriction frameworks where the DNA sequences in the region of significant handicaps (see N30153, N30154, N30158), and the restriction frameworks where the DNA sequences in the region of significant handicaps (see N30153, N30154, N30158), and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence of human interferon (huIFN) alpha-61A gene around AA 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alpha-beta hybrid interferon; multi-class hybrid interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-NOV-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                            15-JUL-1985;
19-JAN-1983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JUL-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US4758428-A
Multi-class hybrid interferon polypeptide(s)
                                                                               WPI; 1988-219882/31.
N-PSDB; n80050.
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tes 5; Conserv
                                                                                                                                                                                                                                                                                             (CETU ) CETUS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N
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83CA-0419758.
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83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  therapy.
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34;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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Anulti-class hybrid IFN polypeptides having an AA sequence composed of 2 distinct subsequences are claimed. The plasmids used in the CC of 2 distinct subsequences are claimed. The plasmids used in the CC phM101/trp/beta-1. Assembly of the palpha61A plasmid invovled replacing CC the DNA fragment encoding the 23 AA signal polypeptide of preinterferon CC with a 120BP ECORI/Sau3A promoter fragment E.coli trp promoter, operator, CC and trp leader ribosome binding site preceoperator, encoding an ATG CC initiation codon and using HindIII site that was inserted, 59 nucleotides initiation codon and using HindIII site that was inserted 59 nucleotides (CC and of the TGA translational stop codon, to insert the gene into the CC and of the TGA translational stop codon, to insert the gene into the CC plasmid pBM11 (a deriv of pBR322 having a deletion between the HindIII CC plasmid pBM11 (a deriv of pBR322 having a deletion between the HindIII CC plasmid psite of the complete DNA sequence of the promoter and gene CC in n80049. The hybrid gene was constructed by taking advantage of the CC cutting site of the huffn alpha-61A & huffn beta-1 at around AA 40 of both CC cutting site of the huffn alpha-61A bNA is ligated to the DNA sequence CC cutting site of the huffn alpha-61A bNA is ligated to the DNA sequence CC cutting site of the site of huffn beta-1, to create a fusion of the CC two genes while preserving the translational reading frame of both.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             having sequence from interferon-alpha-1 and sequence interferon-beta-1 for restricted activity
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fig 17; 24pp; English
             12 AA;
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RESULT
Y27814
                                                                                                                                                                                               Query Match
Best Local S
Matches 5
                                                                                                                            Human secreted protein encoded by gene No.
                                                                                                                                               Y27814;
                                                                                                                                     30-JUL-1999
                                                                                                                                                       Y27814 standard; Protein; 14 AA.
                                                                                                                                                                             2 dfgfpq 7
                                                                                                                                                                                      6 DFGFPE 11
                                                                                                                                                                                               . Similarity
5; Conserv
                                                                                                                                                                                                Conservative
                                                                                                                                      (first entry)
                                                                                                                                                                                                     29.7%;
                                                                                                                                                                                                     Score 33;
Pred. No.
                                                                                                                                                                                                1; Mismatches
                                                                                                                                                                                                      DB
34;
                                                                                                                                                                                                          9;
                                                                                                                                                                                                  0;
                                                                                                                                                                                                          Length 12
                                                                                                                                                                                                  Indels
                                                                                                                                                                                                   0;
                                                                                                                                                                                                   Gaps
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0;

Qy В

Human; secreted protein; fusion protein; gene therapy; protein therapy; diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzhelmer's disease; restenosis; AIDS; cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion; cendocrine; metabolism; regulation; malabsorption; gastritis; neoplasm. 17-NOV-1997; 07-NOV-1997; 07-NOV-1997; 07-NOV-1997; 07-NOV-1997; 07-NOV-1997; 07-NOV-1997; 07-NOV-1997; 07-NOV-1997; 07-NOV-1997; 04-NOV-1998; WO9924836-A1 20-MAY-1999 97US-0064908. 97US-0064911. 97US-0064912. 97US-0064983. 97US-0064984. 97US-0064985. 97US-0064987. 97US-0066100 97US-0064900 98WO-US23435

97US-0064988

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RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC treating allergies or arteriosclerosis. Incorporation of a promiscuous CC Th (functional in genetically diverse subjects) into an immunogen CC improves capacity to induce a strong Thelper cell-mediated immune CC response, resulting in production of antibodies against a target antigen. CC The can replace carrier proteins and pathogen-derived Thelper epitopes. CC Sequence Y91121 represents a promiscuous Thelper epitope from the CC epitope. Sequence Y91121 represents a promiscuous Thelper epitope from the CC epitope. Sequence Y91141 represents a promiscuous Thelper epitope from the CC epitope. Sequence Y91141 represents a promiscuous Thelper epitope from the CC epitope. Sequence Y9124 represents a promiscuous Thelper epitope from the measure of Y91245-Y91244 are antigenic medically and sequences Y91144-Y91155 are CC synthetic epitopes derived from this HBV epitope. Y91197 is the LHRH target CC synthetic epitopes derived from this HBV epitope. Y91200 is comatostatin, and Y91201-Y91207 are antigenic peptides. Y91200 is comatostatin and a Th epitope. Somatostatin immunogens may be used to promote growth in livestock. Y91208 is a human CD4 CDR2-like domain CC antigenic peptides which may be used to prevent HIV infection(of T C epitope. Y90212 is a modified version of a human IgE (immunoglobulin CC peptides which may be used to prevent HIV infection(of T C epitope which may be used in the treatment of allergies. Y91220 is a Pasmodium falciparum circumsporozoite (CS) target antigen, and CC used in a malaria vaccine. Y91228-Y91231 target antigen, and CC used in a malaria vaccine. Y9128-Y91231 represent CETP-derived peptides and Y91232-Y91241 are immunogens comprising a CETP peptide and a Th epitope shich may be used to prevent or treat arteriosclerosis and CC and Y91232 and Y9124-Y91251 and Y91253 are HIV-1 neutralising CC and Y91234-Y9126 and Y91251 and Y91253 are HIV-1 neutralising CC antigenic peptides of the Invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 15
                               Oryctolagus cuniculus
                                                                                                                                                                                                               Human/Rabbit CETP common peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                               W24294 standard; peptide; 11 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunotherapy; for inhibition of the action of interior hormone releasing hormone (LIRH) for contraception, treatment of hormone-dependent cancer, prevention of boar taint in meat, and immunocastration); for promoting the growth of animals; or for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of infections (HIV, foot-and-mouth disease or malaria); for cancer
                                                                                                                                                 Immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein (CETP) or HIV epitopes, immunoreactive self-antigen or (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 FGFPEHLLVDFLQSLS 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             σ
sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fgfpkhllvdflqsls 16
                                                                                                     response; high density lipoprotein; HDL; cholesterol; human; epitope; cholesteryl ester transfer protein; CETP; rabbit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   peptides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           71.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 79; DB 21;
Pred. No. 3.5e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                but more generally against any pathogen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
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RESULT
P30225
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                19-JAN-1982;
03-FEB-1983;
15-JUL-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequences given in W24292-94 were used in the method of the invention to stimulate an immune response to increase high density lipoprotein (HDL) cholesterol in a mammal exhibiting low levels of serum HDL. These peptides represent immunogenic epitopes of cholesteryl ester transfer protein (CETP). The method utilises the body's own immune system to lower CETP levels, thereby increasing the level of beneficial HDL cholesterol, preferably in serum. The method avoids the problems associated with the repeated administration of drugs which have undesirable side effects. This peptide represents a region of CETP which is common to both human and rabbit proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stimulating an immune response to increase high density lipoprotein - avoids repeated administration of toxic drugs to lower cholesteryl ester transfer protein levels
                                                                                                                                                                                                                                Hybrid interferon; antiviral; therapy; cancer;
                                                                                                                                                                                                                                                                                                                                 P30225 standard; Protein; 12 AA
                                                                                                         21-JUL-1983
                                                                                                                                                                     Misc-difference
                                                                                                                                                                                                                                                          Sequence of interferon (HulfN) -alpha-61A around amino acid 40
                                                                                                                                                                                                                                                                                    25-MAY-1992
                                                                                                                                                                                                                                                                                                            P30225;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 5; Page 16; 26pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Brostoff SW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9639168-A1
          (CETU-) CETUS
                                                                                  18-JAN-1983;
                                                                                                                                  WO8302461-A
                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-042849/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (IMMU-) IMMUNE RESPONSE CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                     12 HLLVDFLQSLS 22
                                                                                                                                                                                                                                                                                                                                                                                             al Similarity
11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Carlo DJ, Kwoh
          CORP
                                82US-0340782.
83US-0463574.
85US-0755265.
                                                                                83WO-0900607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96WO-US09143
                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                         /label= AA No.
                                                                                                                                                                                                                                                                                                                                                                                                                                           47.7%; Score 53;
100.0%; Pred. No.
live 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 18;
. 0.025;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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CC protectin (CETP) or HIV epitopes, but more generally against any pathogen, CC pertide immunoreactive self-antigen or tumour antigen. The Th epitopes and CC pertide immunogens may be used for prevention and/or treatment of CC infections (HIV, foot-and-mouth disease or malaria); for cancer cc immunotherapy; for inhibition of the action of luteinising hormone (LHRH) for contraception, treatment of hormone-CC dependent cancer, prevention of boar taint in meat, and CT treatment of immunocastration); for promoting the growth of animals; or for CC treating allergies or arteriosclerosis. Incorporation of a promiscuous Th (functional in genetically diverse subjects) into an immunogen CC response, resulting in production of antibodies against a target antigen. CC sequence v91121 represents a promiscuous Thelper epitope from the CC response, resulting in production and pathogen-derived Thelper epitopes. Sequence v91121 represents a promiscuous Thelper epitope from the CC v1245-v91246 represents synthetic Thelper epitope from the Propose Sequence v91127 represents a promiscuous Thelper epitope from the Synthetic epitopes derived from this HBV epitope. V91144-V91155 are synthetic epitopes derived from this HBV epitope. V91156-Y91196, CC v91227 and v91244 are antigenic peptides comprising an LHRH cantigenic peptide used in these LHRH antigenic peptides. V91200 is comatostatin, and v91201-v91207 are antigenic peptides. V91200 is comatostatin and a Thepitope. Somatostatin immunogens may be used to prownt HIV infection of T cells. V90212 is a modified version of a human IgE (immunoglobulin Cells.) CH3 domain, and v90213-v90219 are Thepitope/IgE CH3 antigenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-160564/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Y91229 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9966957-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cholesteryl ester transport protein; anti-arteriosclerotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human cholesteryl transport protein (CETP) peptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Y91229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UNBI-) UNITED BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                asmodium falciparum; circumsporozoite; antimalarial; CETP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              invention relates to novel promiscuous T helper cell epitopes (Th), immunogenic peptides comprising the Th epitopes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and mouth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T-cell epitope;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   growth promotion; CD4 receptor; HIV-1;
h disease virus; immunoglobulin E; IgE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0100412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US13975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        deficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   measles virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 anti-allergic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IJ
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Y91230
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a peptide derived from foot and mouth disease virus (FMDV) VPI capsid protein and Y91221-Y91222 comprise this peptide and a Th epitope. Y91223 is a Plasmodium falciparum circumsporozoite (CS) target antigen, and Y91224-Y91225 comprise the CS antigen and an MVF Th epitope and may be used in a malaria vaccine. Y91228-Y91231 represent CETP-derived peptides and Y91232-Y91241 are immunogens comprising a CETP peptide and a Th epitope which may be used to prevent or treat arteriosclerosis and cardiovascular disease. Y91247 and Y91252-Y91257 are HTV-1 neutralising B-cell epitopes, and Y91248-Y91251 and Y91258-Y91273 are antigenic peptides component in an anti-HTV-1 waccine. Y91198 and Y91199 are respectively an immunostimulatory invasin protein epitope from Yersinia species, and hinge spacer peptide, both of which may optionally be used in the antigenic peptides of the invention.
                                                                                                                     New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis or human immune deficiency virus -
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Promiscuous T-cell epitope; measles virus F protein; MVF; hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope; luteinising hormone releasing hormone; LRRH; contraceptive; anticancer; somatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMDV; foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; Plasmodium falciparum; circumsporozoite; antimalarial; CETP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  cholesteryl ester transport protein; anti-arteriosclerotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                        20-JUN-1998;
                                                                                                                                                                                                                                                                                                                        21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                       29-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                       W09966957-A2
                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human cholesteryl transport protein (CETP) peptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Y91230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Y91230 standard; peptide; 16
                                                                                                                                                                                                                                                       (UNBI-) UNITED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              peptides which may be used in the treatment of allergies.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                          BIOMEDICAL INC
                                                                                                                                                                                                                                                                                        98US-0100412.
                                                                                                                                                                                                                                                                                                                      99WO-US13975
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3. 8.5e-07;
0;
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The invention relates to novel promiscuous T helper cell epitopes (Th), and immunogenic peptides comprising the Th epitopes of the invention along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport

Claim 10;

Page

62; 129pp; English.

β Q

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Best Loc
Matches
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                                                                                                    method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesterol concentration of a mammal whose blood also contains CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios. The method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
method can provide an autogenic immunological process for lessening transfer of cholesteryl esters from HDL particles and for increasing HDL cholesterol concentration of a mammal whose blood also contains CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL//DL cholesterol ratios method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
                                                                                                                                                                                                                                                                                                                  Disclosure; Page 88; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                New recombinant DNA vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glenn K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antibody production; cholesteryl ester transfer; therapy
high density lipoprotein; HDL cholesterol concentration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; antibody production; cholesteryl ester transfer; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This sequence represents an immunogenic fragment of the rabbit cholesteryl ester transferase protein (CETP). The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen transfer of cholesteryl esters from high density lipoprotein (HDL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human CETP immunogenic fragment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pro-atherogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 100 es 22; Conservative
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Matches 22
                                                                                                      This sequence represents an immunogenic fragment of the rabbit cholesteryl ester transferase protein (CETP). The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios. The method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                             Glenn K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oryctolagus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; HDL; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                            19-SEP-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9915655-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rabbit CETP immunogenic fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Y13809 standard; peptide; 22 AA
                                                                                                                                                                                                                                                                                             New recombinant DNA vaccines
                                                                                                                                                                                                                                                                                                                    WPI; 1999-276984/23
                                                                                                                                                                                                                                                                                                                                                                    (MONS ) MONSANTO CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pro-atherogenic
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                                                                                                                                                                                                                                                                   Page 73; 99pp; English.
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                          Conservative
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                                                                                    AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                 98WO-US19366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              dyslipoproteinaemia
                                      96.4%;
95.5%;
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22
                                    Score 107; I
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                          Mismatches
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                                      DB 20;
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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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1: /SIDS1/gcgda
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10: /SIDS1
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21.518 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result

Query

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Y18812	Y19066	W65690	Y27814	P80053	P30225	W24294	Y91230	Y91229	Y13809	Y13821	Y13815	ID
Lecithin:cholester	Lecithin:cholester	Fibronectin bindin	Human secreted pro	Sequence of human	Sequence of interf	Human/Rabbit CETP	Human cholesteryl	Human cholesteryl	Rabbit CETP immuno	Human CETP immunog	Rabbit CETP immuno	Description

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12	ء و	16	22	22) () () K	22	15	15	14	13	10	10	9	21	20	20	19	19	13	11	1	22	20	20	22	21	12	22	22
16 18	17	17	20	20	2 6) (3 6	19	19	L 3	19	20	15	19	21	21	16	19	16	18	21	20	17	19	15	19	19	20	20	20
88 89	834	841	9682	920	A18220	V19917	W38080	561	81	161	7	567	810	56	Y69793	57	σ	o	W13199	œ	Y82915	944	589	19	127	566	566	279	Y19320	854
Synthetic HTLV pep HTLV-1 derived pep	nomato	erferon-da	Nucleic acid bindi	Lecithin: cholester	Fecithin: cholester	recruit citorescer	PPPPY motif contai		recognise	Sequence encoded b		enic	is B	æ	n interleuki	Ωı	C	P1 immun	of p53		ibitin	듯	#4 of	rotein	tivating	13.	٠.	nalian prola	Lecithin:cholester	Lecithin:cholester

ALIGNMENTS

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RESULT
Y13815
                                                                                 08-JUL-1999
                                                                                       Y13815;
                                                                           Rabbit CETP immunogenic fragment.
                                                                                            Y13815 standard; peptide; 22 AA.
                                                                                 (first entry)
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CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; HDL; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration; pro-atherogenic dyslipoproteinaemia. WO9915655-A1. Oryctolagus sp.

01-APR-1999 17-SEP-1998; 98WO-US19366

19-SEP-1997; 97US-0934367.

(MONS) MONSANTO CO.

Glenn K, Needleman P;

WPI; 1999-276984/23

New recombinant DNA vaccines

Disclosure; Page 75; 99pp; English.

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RESULT 15
5304631-16
; Patent No. 5304631
; APPLICANT: STEWART, JOHN M.; HAHN, KARL W.;. KLIS, WIESLAW A.
TITLE OF INVENTION: SYNTHETIC HELIZYME ENZYMES
; NUMBER OF SEQUENCES: 16
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/464,932
; ILING DATE: 16-JAN-1990
; SEQ ID No:16:
; LENGTH: 15
Search completed: December 21, 2000, 08:31:50 Job time: 373 sec
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                                                                                                                                       Query Match 25.0%; Score 26; DB 5; Length 15; Best Local Similarity 54.5%; Pred. No. 1.6e+02; Matches 6; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                        5 EKAMMLLGQVK 15
||| || ::|
2 EKAKKLLEELK 12
                                                                            5 EKAMMLLGQVK 15
||| || ::|
2 EKAKKLLEELK 12
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Best Local Similarity
Watches 5; Conserv?
              US-08-481-985B-28
                                RESULT 13
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 Sequence 28,
                                                                                                                                                                                                                                                            TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
                                                                                                                                       Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                     Query Match
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/801,818
FILING DATE: 05-DEC-1991
CLASSIFICATION. 530
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION US/08/484,905
FILING DATE: 07-JUNE-1995
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Abastado, Jean-Pierre
APPLICANT: Kourilsky, Philippe
TITLE OF INVENTION: An Altered Major Histocompatibility
TITLE OF INVENTION: Complex(MHC) Determinant and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
CITY: V
STATE:
                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 33,332
REFERENCE/DOCKET NUMBER: 03495.0106-03000
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/792,473 FILING DATE: 15-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS-/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
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                                                                                                        3 TGEKAMMLLGOVK 15
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                                                                           TSEGCRQILGQLQ 15
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o. 5976551
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                                                                                                                                                                                                                                                                                                                                                                                                    Potter, Jane E.
Application US/08481985B
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nilarity 100.0%; Pred. No.
Conservative 0; Mismatc
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                                                                                                                                      Conservative
                                                                                                                                                                                                                                                  linear
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                                                                                                                                                                                                                              peptide
                                                                                                                                                      25.0%;
38.5%;
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                                                                                                                                    Score 26; DB
Pred. No. 1.6e
3; Mismatches
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1.6e+02;
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hes 0;
                                                                                                                                                                   Length 15;
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                                                                                                                                       Indels
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Patent No. 5304631

APPLICANT: STEWART, JOHN M.; HAHN, KARL W.;. KLIS, WIESLAW A.;
TITLE OF INVENTION: SYNTHETIC HELIZYME ENZYMES
NUMBER OF SEQUENCES: 16
CURRENT APPLICATION DATA:
                                                                                                                                                               RESULT 14
5304631-8
                                                                                                                                                                                                                                  В
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5304631-8
                                                                                                                                                                                                                                                                                                                                                                                    US-08-481-985B-28
                          FILING DATE:
                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 36.0
Ches 5; Conservative
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: MEYETS, KENNETh J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03495.0106-04000
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/792,473
FILING DATE: 15-NOV-1991
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Mottez, Estelle
APPLICANT: Abastado, Jean-Pierre
APPLICANT: Kourilsky, Phillipe
                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 0 FILING DATE: 05-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 07-JUI CLASSIFICATION: 43
                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 202-408-4400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: D.C.
ZIP: 20005-3315
               LENGTH: 15
                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                  3 TSEGCRQILGQLQ 15
                                                                                                                                                                                                                                                                3 TGEKAMMLLGOVK 15
                                                                                                                                                                                                                                                                                                                                                                                                                                               15 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     202-408-4000
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                                               16-JAN-1990
                                                                                                                                                                                                                                                                                                                                                                                                  peptide
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                                                                                                                                                                                                                                                                                                                 25.0%;
38.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            148
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                                                               US/07/464,932
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US 07/801,818
                                                                                                                                                                                                                                                                                              Score 26; DB Pred. No. 1.6e 3; Mismatches
                                                                                                                                                                                                                                                                                                                                 DB 3;
                                                                                                                                                                                                                                                                                                                               Length 15;
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                                                                                                                                                                                                                                                                                              Gaps
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Query Match Best Local Similarity

25.0%; 54.5%;

Score 26; Pred. No.

DB 5; 1.6e+02;

Length 15;

CURRENT APPLICATION DATA:

OPERATING SYSTEM: Macintosh 6.0.7

Microsoft Word 4.0

APPLICATION NUMBER

US/07/920,430

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Дb
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Best Local Similarity
Watches 5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-07-920-430-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3, Application US/08251464 Patent No. 5723747
                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 7.0
SOFTWARE: Microsoft Word 5.1a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/251,464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/659,975

FILING DATE: 22 FEB 1991

ATTORNEY/AGENT INFORMATION:

NAME: Elizabeth Lassen

REGISTRATION NUMBER: 31,845

NAME: Donna E. Scherer
                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (916) 753-1510 INFORMATION FOR SEQ ID NO: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DAM...
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/796,256
APPLICATION NUMBER: 20 NOV 1991
TATA: DATE: 70 NOV 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: CGI
TELECOMMUNICATION INFORMATION:
TELEPHONE: (916) 753-6313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/767,251
FILING DATE: 27 SEPT 1991
                                                                              FILING DATE: 01-JUN-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                            ADDn...
STREET: L.
CITY: Davis
TR: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS: ADDRESSEE: Calgene,
                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lassner, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Metz, James
                          NAME: Elizabeth Lassen
REGISTRATION NUMBER: 3:
NAME: Donna E. Scherer
                                                                                                                                                                                                                                                         COUNTRY: US
ZIP: 95616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
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                 REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7 DITGE 11
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                                                                                                                                                                                                                                                                                                                           1920 Fifth Street
                                                                                                                                                                                                                                                                         USA
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Schwedler
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                                                31,845
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ER: CGNE 79-3
                                                                                                                                                                                                                     3.50 inch, 1.0 MB
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b; Pred. No. 1.4e+02;
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; MOLECULE TYPE: PCT-US92-01364-3

peptide

TOPOLOGY:

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Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (916) 753-151
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                           TELEFAX: (916) 753-15: INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 36,924
REFERENCE/DOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION:
TELEPHONE: (916),753-6313
                                                                                                      NAME: Donna E. Scherer
REGISTRATION NUMBER: 34,719
REFERENCE/DOCKET NUMBER: CG
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Calgene, Inc.
STREET: 1920 Fifth Street
                                                                                                                                                                        APPLICATION NUMBER: 07/796,256
FILING DATE: 20 NOV 1991
ATTORNEY/AGENT INFORMATION:
NAME: Elizabeth Lassen
REGISTRATION NUMBER: 31,845
                                                                                                                                                                                                                                                       APPLICATION NUMBER: 07/767,251
FILING DATE: 27 SEPT 1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Microsoft WO CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                          FILING DATE: 22 FEB 1991 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA: 07/659,975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Calgene, TITLE OF INVENTION:
                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMUTER: Apple Macintosh
OPERATING SYSTEM: Macintos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE:
LENGTH: 15 ....
                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 19
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: POFILING DATE: 19920212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Davis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
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                                                                                            TELEPHONE:
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)GY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95616
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                              13 amino acids
                                                                            (916)
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                                                                                             (916) 753-6313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Diskette,
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                                                                            753-1510
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hes 0;
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; STRANDEDNESS:
; TOPOLOGY: unk
; MOLECULE TYPE:
US-08-693-697-25
                        RESULT 8
US-08-693-696-25
: Sequence 25, Application US/08693696
; Patent No. 6005080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; MOLECULE TYPE: peptide US-08-355-888A-25
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US-08-693-697-25
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Best Local Similarity 66./
Warches 4; Conservative
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Best Local Similarity
Matches 4; Conserv
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       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: POISSANT, Brian M.
REGISTRATION NUMBER: 28,462
REFERENCE/DOCKET NUMBER: 8907
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS: LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/693,697
FILING DATE: 05-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Zupancic, Thomas J.
APPLICANT: Shafer, Alan W.
TITLE OF INVENTION: HU-BL.219, A NOVEL HUMAN HEMATOPOIETIN
TITLE OF INVENTION: RECEPTOR
NUMBER OF SEQUENCES: 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: New York
STATE: New Yor
COUNTRY: USA
                                                                                                                                                               13 QVKYGL 18
                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
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10036-2711
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66.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 4; Conserv
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COUNTRY: USA
2IP: 95616
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: Apple Macin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (212) 869-97.
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
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CLASSIFICATION:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/355,888
APPLICATION NUMBER: 14-DEC-1994
APPLICATION:
                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Calgene, Inc.
STREET: 1920 Fifth Street
                                                                                                                                                                                                            APPLICANT: James George Metz
APPLICANT: Michael Roman Poll
APPLICANT: Michael W. Lassner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 28,462
REFERENCE/DOCKET NUMBER: 7225
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 14-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Poissant, Brian M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 10036-2711

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Re-base #1.0, Version #1.30

CURRENT APPLICATION DATA:
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APPLICANT: Shafer, Alan W.
TITLE OF INVENTION: Hu-B1.219, A NOVEL HUMAN HEMATOPOIETIN
TITLE OF INVENTION: RECEPTOR
NUMBER OF SEQUENCES: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                                                            TITLE OF INVENTION: Fatty Acyl Reductases NUMBER OF SEQUENCES: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                   STREET: 1920
CITY: Davis
STATE: CA
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ZIP: 10036-2711
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Cioffi, Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
E: Diskette, 3.1
Apple Macintosh
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                                                                                                                                                                                                                                Roman Pollard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26.0%;
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                3.50 inch, 1.0 MB
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PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 01 FILING DATE: 14-AUG-1996

us 08/689,807

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Best Local (
                                                                                                                                                                                                                                                                                                                                            GENERAL
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INFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER: US 08/537,400
FILING DATE: 02-0CT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 08/525,057 FILING DATE: 08-SEP-1995 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/576,759
FILING DATE: 21-DEC-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                             APPLICANT: Snodgrass, H. R.
APPLICANT: Cioffi, Joseph
APPLICANT: Zupancic, Thomas J.
APPLICANT: Shafer, Alan W.
TITLE OF INVENTION: Hu-B1.219, A NOVEL HEMATOPOIETIN
TITLE OF INVENTION: RECEPTOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: peptide
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APPLICATION NUMBER:
                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/537,397 FILING DATE: 02-OCT-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Esmond, Robert W. REGISTRATION NUMBER: 32,893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                      COUNTRY:
                                                                                                                                           CITY: New York
                                                                                                                                                          STREET:
                                                                                                                                                                              ADDRESSEE:
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SOFTWARE:
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5; Conserv
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10036-2711
                                                                                                                      New York
                                                                                                                                                          E: Pennie & Edmonds
1155 Avenue of the Americas
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PatentIn Release #1.0, Version #1.30
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62.5%;
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Best Local S
Matches 4
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Patent No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                              APPLICATION NUMBER: US/08/355,888A FILING DATE: 14-DEC-1994 CLASSIFICATION: 435 ATTORNEY_AGENT INFORMATION: NAME: Poissant, Brian M. REGISTRATION NUMBER: 28,462 REFERENCE/DOCKET NUMBER: 7225-078 TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090
                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Snodgrass, H. R. APPLICANT: Cioffi, Joseph APPLICANT: Zupancic, Thomas
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Shafer, Alan W.
TITLE OF INVENTION: Hu-B1.219, A NOVEL HUMAN HEMATOPOIETIN
TITLE OF INVENTION: RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 1155 A CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 66.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1 CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                             TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                        ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                 TELEFAX: (212) 869-9
TELEX: 66141 PENNIE
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                 STRANDEDNESS:
                                  TYPE:
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10036-2711
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                                amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (212) 790-9090
(212) 869-9741/8864
                                                                                                                  (212) 869-9741/8864
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unknown
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66.7%;
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Pred. No.
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91;
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Best Local Similarity
Matches 5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-159-340A-17; Sequence 17, Appli; Patent No. 5565352
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                                                                                                                         Sequence 21, Application US/08706702
Fatent No. 5948614
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Chatterjee, Deb K.
TITLE OF INVENTION: Cloned DNA Polymerases from Thermotoga
TITLE OF INVENTION: maritima and Mutants Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (512) 418-3000
TELEPHONE: (512) 474-7577
TELEFAX: (512) 474-7577
INFORMATION FOR SEQ ID NO: 17:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Hochstrasser, Mark
APPLICANT: Papa, Feroz
TITLE OF INVENTION: DEUBIQUITINATING ENZYME: COMPOSITIONS
TITLE OF INVENTION: AND METHODS
NUMBER OF SEQUENCES: 44
                                                                                             NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Highlander, Steven L.
REGISTRATION NUMBER: 37,642
REFERENCE/DOCKET NUMBER: ARCD:112/HYL
                                 STATE:
                                             CITY: Washington
                                                                                                                                                                                                                                                                                                                                      14 VKYGLHN 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/0
FILING DATE: 24-NOV-1993
                 COUNTRY:
                                                                 STREET:
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                                                                                 ADDRESSEE:
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RY: USA
20005-3934
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                                                               1100 New York Ave., N.W., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E: Arnold, White & Durkee P.O. Box 4433
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71.4%;
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Pred. No. 44;
                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     Length 14;
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RESULT 4
US-08-706-706-21
Sequence 21, Applica
Sequence 015668
Patent No. 601568
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Best Local Similarity
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FILING DATE: 02-OCT-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/576,759
FILING DATE: 21-DEC-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/537,397
FILING DATE: 02-OCT-1995
                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 202-371-260
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
ZIP: 20005-3934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/706,706
                                                                                                                                                                                                                   APPLICANT: Chatterjee, Deb K.
TITLE OF INVENTION: Cloned DNA Polymerases from Thermotoga and NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 New York Ave., N.W., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/525,057
FILING DATE: 08-SEP-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IHM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                     APPLICANT: Hughes, A. John APPLICANT: Chatterjee, Deb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 14-AUG-
PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                  STREET: 1100 New CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Esmond, Robert W. REGISTRATION NUMBER: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/689,807 FILING DATE: 14-AUG-1996
                                                                                                                                                                                      STATE:
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62.5%;
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Pred. No.
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
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                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seq length:
seq length:
  Issued_Patents_AA:*
1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
5: /cgn2_6/ptodata/2,
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Maximum Match 100%
Listing first 45 summaries
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104
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  164575 seqs, 16761186 residues
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/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/6_COMB.pep:*
/cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
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  Gapext 0
US-08-182-067-14
US-08-465-313-14
5304631-5
US-08-466-975A-12
US-08-466-975A-13
US-08-391-671A-13
US-08-391-671A-13
US-08-391-671A-13
US-08-475-634D-2
US-08-467-902A-12
US-08-467-902A-13
US-08-467-902A-13
US-08-480-190-77
US-08-480-190-77
US-08-480-390-77
US-08-480-390-77
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US-08-159-340A-17

US-08-706-702-21

US-08-706-705-21

US-08-306-231-9

US-08-355-888A-25

US-08-693-697-25

US-08-693-696-25

US-08-693-696-25

US-08-251-464-3

US-08-251-464-3

US-08-484-905-28

US-08-484-905-28

US-08-484-905-28

US-08-484-905-28

US-08-484-905-28

US-08-484-905-28
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Compugen Ltd
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3.355 Million cell updates/sec
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         sequence 28, Appl
Sequence 28, Appl
Patent No. 5304631
Patent No. 5304631
Sequence 14, Appl
Sequence 14, Appl
Sequence 12, Appl
Sequence 13, Appl
Sequence 13, Appl
Sequence 12, Appli
Sequence 13, Appli
Sequence 17, Appli
Sequence 17, Appli
Sequence 77, Appli
                                                                                                                                                           Sequence 20, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 25, Appl
Sequence 25, Appl
Sequence 25, Appl
Sequence 3, Appli
                                                                                                                                                                                                                                                                             Description
Sequence
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US-08-164-618-20
    Query Match
Best Local Similarity
Watches 5; Conserv
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                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                LENGTH:
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            Conservative
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29 25 24.0 16 2 US-08-480-190-76 30 25 24.0 16 4 PCT-US93-07545-76 31 25 24.0 16 4 PCT-US93-07545-76 31 25 24.0 17 1 US-07-894-212A-3 32 25 24.0 18 1 US-07-893-92BA-3 33 25 24.0 18 2 US-08-480-379-192 34 25 24.0 18 2 US-08-480-379-192 35 25 24.0 18 2 US-08-480-379-192 36 25 24.0 19 2 US-08-480-190-74 38 25 24.0 19 2 US-08-480-190-75 39 25 24.0 19 2 US-08-480-379-74 39 25 24.0 19 2 US-08-480-379-74 39 25 24.0 19 2 US-08-480-379-74 40 25 24.0 19 2 US-08-480-379-75 41 25 24.0 19 2 US-08-480-379-75 42 25 24.0 19 4 PCT-US93-07545-75 43 25 24.0 19 4 PCT-US93-07545-75 44 25 24.0 20 2 US-08-480-190-191 45 25 24.0 20 2 US-08-480-190-191
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ALIGNMENTS

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; MOLECULE TYPE: peptide US-08-164-618-20
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                                                                                                                                                                                            TELEPHONE: (312) 616-54
TELEFAX: (312) 616-5460
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 07/591,988 FILING DATE: October 2, 1990 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Ghadiri, TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: SC
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 616-5400
                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                         NAME: Gamson, Edward G. REGISTRATION NUMBER: 29,381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 180 No CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Dressler, Goldsmith, Shore, Sutker & ADDRESSEE: Milnamow, Ltd.
STREET: 180 No. 5408036th Stetson, Suite 4700
                                                                                                                                  TYPE: amino acid
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QPPRW7;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-MAY-2000 (TrEMBLrel. 13, Last annotation updata)
ACID THIOL PROTEASE (FRAGMENT).
                                                                                                                                                                                                                                                                               Akins D.R., Popova T., Brusca J., Goldberg M.L., Li M., Norgard M.V., Radolf J.D.;
Submitted (AUG-1994) to the EMBL/GenBank/DDBJ databases.
EMBL; L31425; AAA64901.1; -.
Hypothetical protein.
NON_TER 19 19
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NON_TER 19 AA; 2321 MW; C821BF312DB41512 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q44850; PRELIMINARY; PRT; 19 AA. Q44850; 01-NOV-1996 (TrEMBLrel. 01, Created) 01-NOV-1996 (TrEMBLrel. 01, Last sequence update) 01-NOV-1996 (TREMBLREL. 01, Last annotation update) 11-NOV-1996 (TREMBLEL 01, Last annotation update) HYPOTHETICAL PROTEIN (FRAMENT).

Borrelia burgdorferi (Lyme disease spirochete).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miyata S., Kihara H.K.;
"Cathepsin L-like protease from Xenopus nucleoside phosphates and nucleic acids. Zool. Sci. 12:771-774(1995).
SEQUENCE 18 AA; 2060 MW; AIDC9B106B:
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Infect. Immun. 60:5259-5266(1992).
SEQUENCE 18 AA; 2060 MW; 29C8EOAB77E21805 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-297;
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MEDLINE; 96417001.
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                                                                                                Score 25; DB Pred. No. 1.8e 1; Mismatches
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Turelli P., Guiguen F., Mor
Submitted (DEC-1996) to the
EMBL; U81435; AAB60824.1; -
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SEQUENCE 12 AA; 1279 MW;
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                                                                                                                                                             Caprine arthritis
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                                                                                                                                                    Viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PTGER3.
                  11 PGW 13
8
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                                                                                                                                                                                                                                                                                        3 LHLQGEREP 11
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                                                                                                                                                                                                                                                                               8 LHIVGKYKP 16
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PGW
                                    Similarity 100
3; Conservative
10
                                                                                                                                                   Retroid
                                                                                                                                                                                                                                                                                                                                                                                                                                    ıs (Human).
Metazoa; Chordata; C
~··+heria; Primates; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              O (TrEMBLrel. 13, Created)
O (TrEMBLrel. 13, Last sequence update)
O (TrEMBLrel. 13, Last annotation update)
(PROSTAGLANDIN E RECEPTOR (EP3E)) (FRAGMENT).
                                                                                                                                                                                      (TrEMBLrel. 04, Created)
(TrEMBLrel. 04, Last sequence update)
(TrEMBLrel. 07, Last annotation updat
                                                                                                                                                                               (FRAGMENT).
                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                  s encephalitis virus (CAEV)
viruses; Retroviridae; Len
                                                                                   1279 MW;
                                 22.0%; 5U
100.0%; Pr
                                                                                                             F., Mornex J.F., Vigne R., to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                            22.98;
                                                                                                                                                                                                                                                                                                                   Score 25; DB
Pred. No. 1.8e
3; Mismatches
                                            Score 24;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                               EMBL/GenBank/DDBJ
                                                                                   4B90BBB1E8644EB7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                   142450379B298FEC
                                                                                                                                                                                                                                                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                    Mismatches
                                                                                                                                                                                                                               12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19
                                             DB 12;
1.6e+03;
                                                                                                                                                                                                                                                                                                                            DB 4;
1.8e+03;
                                                                                                                                                   Lentivirus
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                                                                                                                                                                                        update)
                                                                                                              databases
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RESULT OF THE PROPERTY OF THE 
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RESULT
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DT 0
DT 0
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Best Local S
Matches 4
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Best Local Similarity
Matches 4; Conserv
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01-NOV-1999 (TrEMBLrel. 12,
01-NOV-1999 (TrEMBLrel. 12,
CYTOCHROME B (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9T2R9 PRELIMINARY; PRT; 17 AA.
Q9T2R9; Q19T2R9; Q19T2R9; Q19T2R9; Q19T2R9; Q19T2R9; Q19T2R9; Q19T2R9; Q19T2R9; Q19T2R9; Q19T2R9BLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
CYTOCHROME-C REDUCTASE 55 KDA SUBUNIT (EC 1.10.2.2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Prochlorococcus.
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Q9UCG3
Q9UCG3;
01-MAY-2000
01-MAY-2000
01-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
Urbach E., Chisholm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Prochlorococcus
                                                                                                                                                                                                                                                                                                                                                    SEQUENCE. P., Kruft V., Schmitz
Braun 193:99-106(1994).
SEQUENCE 17 AA; 1758 MW; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Solanaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Magnoliophyta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Solanum tuberosum (Potato).
Mitochondrion.
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4; Conserv
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(TrEMBLrel.) (TrEMBLrel.) (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Solanum.
                                                                                                                                                                                                                                                        Conservative
                                                                               PRELIMINARY;
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eudicotyledons; Asteridae; euasterids
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    13,
13,
14,
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Last sequence up
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    Created)
Last sequ
Last anno
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                                                                                    PRT;
      sequence up
annotation
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No.
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1.1e+03;
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4;
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        on update)
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I; Solanales;
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Q16045
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Q9R5F6
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Best Local S
Matches 7
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 RRP RAC
                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 5
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MEDLINE; 9326145.
Nagai Y., Ueno S., Saeki Y., Soga F., Yanagihara T.;
"Expression of the D3 dopamine receptor gene and a nov transcript generated by alternative splicing in human lymphocytes.";
Biochem. Biophys. Res
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q16045
Q16045;
Q1-NOV-1996
Q1-NOV-1998
Q1-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE.

MEDLINE; 93249387.

Bangert K., Johnsen A.H., Christensen U., Thorsen S.;

Bangert N-terminal forms of alpha 2-plasmin inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   plasma.";
Biochem. J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                               Q9R5F6;
01-MAY-2000 (TrEMBLrel. 13, Last sequence
01-MAY-2000 (TrEMBLrel. 14, Last annotatic
01-JUN-2000 (TrEMBLrel. 14, Last annotatic
UREASE SMALL SUBUNIT (FRAGMENT).
Helicobacter mustelae.
                                                                                                                                                                                                                                                                                        EMBL; S63
NON_TER
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (Human).
Eukaryota; Metazoa; C
Mammalia; Eutheria; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                      D3
                                                                                                                                       Q9R5F6
MEDLINE; 93084378
Turbett G.R., Hoj
"Purification and
                                                              UREASE SMALL SUBUNIT (FRAMELICOBACTET mustelae.
Bacteria; Proteobacteria;
                               SEQUENCE.
                                                     Helicobacter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10
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-NOV-1996 (TrEMBLrel. 01, Last sequence update)
-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DOPAMINE RECEPTOR (FRAGMENT).
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                                                                                                                                                                                             2 LLHLQ
|||||
9 LLHLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LLKL-GNQEPG
                                                                                                                                                                                                                                                                                                                      em. Biophys. Res. Commun.
S63845; CAB32270.1; .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7; Conserv
                                                                                                                                                                                                                                     similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . 291:623-625(1993).
19 AA; 2065 MW; 41352BF04D1EEAE9
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nilarity 63.6%;
Conservative
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ilarity 100.0%;
Conservative
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 P.B., Horne R., I characterization
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1586
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Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                             MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 25.5; I
Pred. No. 1.5e
1; Mismatches
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Pred. No.
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                                                                                               sequence update)
annotation update)
   Mee
n of
                                                                  subdivision; Helicobacter
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    the u
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1.3e+03;
hes 0;
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    urease
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                                                                                                                                                                                                                                                               Length 14;
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a novel variant
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P SEQUENCE.
(X MEDLINE; 95337087.
(X MEDLINE; 9533708.
(X MEDLINE; 953370
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018502
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Matches 4
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Best Local S
Matches 5
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01-JAN-1998
01-JAN-1998
01-AUG-1998
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01-MAY-2000
01-MAY-2000
01-MAY-2000
                           EMBL; AF
                                                   SEQUENCE FROM N.A.
STRAILW-EGYPTIAN;
STRAILW-EGYPTIAN;
Hamddan F.F., Ribediro P.;
Submitted (JUN-1997) to the
EMBL; AF006679; AAC62255.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gar:";
Peptides 16:485-489(1995).
SEQUENCE 9 AA; 1099 MW;
                                                                                                                                                                                                                                                                                                                                              01-JAN-1998 (TremBLrel. 05, 01-JAN-1998 (TremBLrel. 05, 01-AUG-1998 (TremBLrel. 07, LYSOPHOSPHOLIPASE HOMOLOG (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE: 95380361.

Conlon J.M., Platzack B., Marra L.E., Youson J.H., Olson K.R., Tolation and biological activity of [Trp5]bradykinin from the of the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the phylogenetically ancient fish, the bowfin and the longnoing the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lepisosteus osseus (Long-nosed gar), and Amia calva (Bowfin). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Semionotiformes; Lepisosteidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   018502
                                                                                                                                                                                                                                                            Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                       Schistosoma
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SEQUENCE.

MEDLINE; 95020803.

Yokota K., Hirai Y., Haque M., Hayashi S., Isogai H., 2

Yokota K., Hirai Y., Fujii N., Oguma K.;

Nagamachi E., Tsukada Y., Fujii N., Oguma K.;

"Heat shock protein produced by Helicobacter pylori.";

Microbiol. Immunol. 38:403-405(1994).

INTERPRO: IPRO02026; -.

PFAM; PF00547; urease_gamma; 1.

cronience 20 AA; 2302 MW; 29C9DFBFD6D21805 CRC64;
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Q9R4W5;
01-MAY-2000
01-MAY-2000
01-JUN-2000
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01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
MHC CLASS II B LOCUS 10 (FRAGMENT).
Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostel; Euteleostel; Acanthopterygii;
Percomorpha; Perciformes; Labroidei; Cichlidae; Oreochromis.
                                                                         NON_TER
                                                                                                              Malaga-Trillo E., McAndrew B., Vincek V., Sueltmann H., Figueroa F., Klein J.; "Linkage relationships and haplotype polyn class II B loci."; Genetics 149:1527-1547(1998).
EMBL; AF050003; AAC41342.1; -.
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01-MAY 2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last sequence update)
101-JUN-2000 (TrEMBLrel. 16, Lanotation update)
30 KDA MAJOR HEAT SHOCK PROTEIN (ERAGMENT).
Helicobacter pylori (Campylobacter pylori).
Bacteria; Proteobacteria; epsilon subdivision; Helicobacter
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SUMMARIES

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Conlon J.M., Olson K.R.;
Conlon of a vasoactive p.
"purification of a vasoactive p.
trout plasma.";
FEBS Lett. 334:75-78(1993).
SEQUENCE 10 AA; 1193 MW; 33
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
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Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
FILAGGRIN (FRAGMENT).
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           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                    Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 EREPGW
:| |||
1 KRPPGW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26.6%;
66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 29; DB 13;
Pred. No. 2.2e+02;
1; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33C59075A3786777 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide related to lysyl-bradykinin from
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CC -1 - SUBCLUE. SHOWS HEMOLYTIC ACTIVITY.
CC -1 - TISSUE SPECIFICTIVE SERVED.
CR PIR: $50018: $50018 : $5016 : $1

CR MARPHISION SHIM: ANIGATION; HAMMOLYSES.
ET MONLERS 13 13 13

SO SECURE 13 AA: 1350 MM; CGEN756BSDFE587D CRC64;

FOUNTY MAICH
DEST LOCAL SIMILATITY 57.1%; Pred. NO. 1.9e-03; Indels 0;

OV 12 GMINGLE 18

Db 7 GILSULF 13

Search Completed December 21, 2000, 08:32:59

Job time: 442 sec
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RESULT
CRTC_SE
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Endoplasmic NON_TER SEQUENCE 2
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SIGNAL
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                                                                                             PROSITE;
PROSITE;
PROSITE;
                                                                                                                                                                                                                                                                                                                      MEDLINE; 93176159.

MEDLINE; 93176159.

Menegazzi F., Guzzo F., Baldan B., Mariau.

"Purification of calreticulin-like protein

"Purification of calreticulin-like protein

"Purification of calreticulin-like protein

"Purification of calreticulin Binds Calcium."
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Rodakis G.C., Lecanidou
Diversity in a chorion
                                                                                                                                                                                                                   PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Spinacia oleracea (Spinach).
Eukaryota; Viridiplantae; Embry
Magnoliophyta; eudicotyledons;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
01-JUL-1993 (Rel. 26, Last annotation update)
CALRETICULIN-LIKE PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPIOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Extended Burdean Bioinformatics Institute. There are no restude by non-profit institutions as long as its content
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              duplications and a putative gene-conversion J. Mol. Evol. 20:265-273(1984).
-i- FUNCTION: THIS PROTEIN IS ONE OF MANY FR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bombyx mori (Silk moth).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Di
                                                                                                                                                                                                                                                                                                             <del>-</del> - <del>-</del> -
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01-JUL-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Caryophyllales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CRTC
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SIMILARITY: MEMBER
                                                                                                                                                                                                                                                                           SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                          PTM: GLYCOSYLATED
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PC1240; PC1240.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 X01068; CAB57790.1;
323219; B23219.
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5; Conser
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                                                                                          PS00803; CALRETICULIN_1; PARTIAL. PS00804; CALRETICULIN_2; PARTIAL. PS00805; CALRETICULIN_REPEAT; PAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chorion;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chenopodiaceae;
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         2645
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                                                              Calcium-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MW.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R., Eickbush T.H. multigene family
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         MW.
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lons; core eudicots; Caryophyllidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Multigene
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         00FAB4C9DEEDCB0F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                              CALRETICULIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Spinacia
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                                                                                                                                                                                                                                                                                                                                                     Mariani P., Treves S.; protein(s) from spinach:1130-1135(1993).
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RESULT 14
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Matches
                        MEDLI.... Ge L. Simmaco M., Ge L. Bossa F
                                                                                                               P32415;
01-OCT-1993 (Rel. 27, Created)
01-OCT-1993 (Rel. 27, Last sequence up
01-OCT-1993 (Rel. 27, Last annotation
HEMOLYTIC PROTEIN AI (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
30-MAY-2000 (Rel. 39, Last annotation update)
PYRUVATE SYNTHASE SUBUNIT PORD (EC 1.2.7.1) (PYRUVATE
DELTA CHAIN) (POR) (PYRUVIC-FERREDOXIN OXIDOREDUCTASE
                                                                                                                                                                                                                                                                                                                                                           IS 80 DEGREES CELSIUS.

-I- CATALLYIC ACTIVITY: PYRUVATE + COA + OXI

-I- COFACTOR: BINDS TWO 4FE-4S CLUSTERS (BY

-I- SUBUNIT: HETEROTETRAMER OF ONE ALPHA, ON
"Purification and characterization extracts of Rana esculenta."; Biochim. Biophys. Acta 1033:318-32
                                                                                                 Rana esculenta (Edible frog).
Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                            Tersteegen A., Linder D., Thauer R.K., Hedderich R.; "Structures and functions of four anabolic 2-oxoacid in Methanobacterium thermoautotrophicum.";
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                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                              Oxidoreductase; Electron
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                                                           TISSUE=SKIN
                                                                     SEQUENCE.
                                                                                    Amphibia;
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                                                                                                                                                                                                                                                                                                                                                 GAMMA CHAIN.
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                                                                                                Craniata;
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Ranidae; Rana
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RESULT 10
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DT 01-FEB
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RN [1]
RP SEQUEN
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STRAIN=63;
STRAINE; 96035889.
                                                                                                                                                                                                                                   P80466;
P80466;
O1-NOV-1995 (Rel. 32, Created)
O1-NOV-1995 (Rel. 32, Last sequence update)
O1-FEB-1996 (Rel. 33, Last annotation update)
OUINOLINE 2-OXIDOREDUCTASE, GAMMA CHAIN (EC 1.--.
Comamonas testosteroni (Pseudomonas testosteroni).
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01-JAN-1990 (
01-JAN-1990 (
01-NOV-1995
                              MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Iwabuchi H., Komori S., Ohashi H., Kimura S.;
"The amino acid sequence of a smooth muscle-contracting chicken rectum. Identity to chicken neurotensin.";
Jpn. J. Pharmacol. 44:455-459(1987).
1. FUNCTION: SMOOTH MUSCLE-CONTRACTING PEPTIDE.
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Eukaryota; Metazoa; Chordata;
Archosauria; Aves; Neognathae;
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P13724;
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                      COFACTOR: FAD AND MOLYBDENUM
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Pred. No. 9.2e+02;
2; Mismatches 2
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; Galliformes; Phasianidae; Phasianinae;
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RESULT 12
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P81755;
30-MAY-2000
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(FRAGMENT)
                                                     CHH3_BOMMO
P20729;
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SEQUENCE
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DISULFID
MOD_RES
MOD_RES
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"A conotoxin from Conus textile with unusual posttranslational modifications reduces presynaptic Ca2+ influx.";

Proc. Natl. Acad. Sci. U.S.A. 96:5758-5763(1999).

-i- FUNCTION: CONOTOXIN WHICH ACTS AT PRESYNAPTIC MEMBRANES, B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conus textile (Cloth-of-gold cone). Eukaryota; Metazoa; Mollusca; Gastr
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30-MAY-2000 (Rel. 39, Last
01-OCT-2000 (Rel. 40, Last
EPSILON-CONOTOXIN TXIX.
                                                                                                                                                                                                                                                                                                                        Presynaptic neurotoxin; Calcium channel inhibitor; Venom; Vitamin Camma-carboxyglutamic acid; Glycoprotein; Hydroxylation; Brominati
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Neogastropoda; Conoidea; Conidae; Conus.
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SUBUNIT: HETEROHEXAMER OF TWO ALPHA CHAINS,
TWO GAMMA CHAINS (PROBABLE).
doreductase; Flavoprotein; FAD; Molybdenum.
TER 10 10
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PTM: O-GLYCAN CONSISTS OF
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3; Conserv
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3; Conserv
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     (Rel. 17, Created)
(Rel. 17, Last sequence update)
(Rel. 17, Last annotation update)
SS HIGH-CYSTEINE HCA PROTEIN 13 PRECURSOR (HC-A.13)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence
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                                                                                                                                                               Score 21; DB 1;
Pred. No. 1.3e+03;
0; Mismatches 1
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                                                                                                                                                                                                                       HYDROXYLATION.
O-LINKED (GALNAC.
386C9E1C74AFA378
                                                                                                                                                                                                                                                        GAMMA-CARBOXYGLUTAMIC GAMMA-CARBOXYGLUTAMIC BROMINATION.
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Pred. No. 1e+03;
                                                                                                                                                                                                                                                                                                                                                            THE DISACCHARIDE GAL-GALNAC
                                                                  PRT;
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                                                                                                                                                                                                                       CRC64;
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                                                                                                                                                                                       Length 13
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Best Loc
Matches
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01-NOV-1995 (Rel. 3
30-MAY-2000 (Rel. 3
3-DEHYDROQUINATE DE
(TYPE II DHQASE) (F
                                                                                                                                                                                                                                                                                                                                                              01-NOV-1995
01-NOV-1995
30-MAY-2000
                                                                                                                                                                                                           STRAIN-NCIB 11946;
MEDLINE; 93123995.
Euverink G.J.W., Hessels G.I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOD_RES
MOD_RES
SEQUENCE
                                                                                                                                                   3-dehydrogulnate dehydratase from Amycolatopsis methanolica.
J. Gen. Microbiol. 138:2449-2457(1992).
                                                                                                                                                                                                                                                                                                   Amycolatopsis methanolica
Bacteria; Firmicutes; Act
                                                                                                                                                                                                                                                                                                                                                                                                                               AMYME.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Primary structure of two neuropeptide hormones with adipokinetic hypotrehalosemic activity isolated from the corpora cardiaca of ho flies (Diptera)."

Proc. Natl. Acad. Sci. U.S.A. 86:8161-8164(1989).

-!- FUNCTION: HYPERTREHALOSAEMIC FACTORS ARE NEUROPEPTIDES THAT ELEVATE THE LEVEL OF TREHALOSE IN THE HEMOLYMPH (TREHALOSE IS THE MAJOR CARBOHYDRATE IN THE HEMOLYMPH OF INSECTS).

-!- SIMILARITY: BELONGS TO THE AKH / HRTH / RPCH FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pterygota;
Tabanidae;
              PROSITE;
                            INTERPRO;
                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                             Amycolatopsis
                                                                                                                                                                                                                                                                                        Actinomycetales;
                                                                                                                                                                                                                                                                                                                                                                                                      P46380;
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MEDLINE; 90046758
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Tabanus atratus (Horse fly).
Eukaryota; Metazoa; Arthropoda;
Eukaryota; Montara, Fndopteryqq
                                                                                                                                                                                                                                                                                                                                                                                                                  AROQ_AMYME
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Vogel V.W., Zhang Y.-S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 PGW
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                                                           FUNCTION: CATALYZE A TRANS-DEHYDRATION VIA AN ENOLATE INTERMEDIATE. IS INVOLVED IN BOTH THE CATABOLISM OF QUINATE AND THE BIOSYNTHESIS OF AROMATIC AMINO ACIDS. HAS A TEMPERATURE OPTIMAL OF 76 DEGREES CELSIUS AND PH OPTIMAL OF 9.0 TYPE II ENZYMES ARE THERMOSTABLE.

CATALYTIC ACTIVITY: 3-DEHYDROQUINATE = 3-DEHYDROSHIKIMATE + H(2)0. PATHWAY: THIRD STEP IN THE BIOSYNTHESIS OF CHORISMATE WITHIN THE BIOSYNTHESIS OF CHORISMATE ACTIVITY.
                                   SUBUNIT: HOMODODECAMER. SIMILARITY: BELONGS TO
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3; Conserv
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                          ARITY: BELONGS IPR001874; -.
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0 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CARDIACA;
                                                                                                                                                                                                                                                                                                                                      . 32, Created)
. 32, Last sequence update)
. 39, Last annotation update)
DEHYDRATASE (EC 4.2.1.10) (3
(FRAGMENT).
                                                                                                                                                                                                                                                                                      utes; Actinobacteria; Actinobacteridae; Pseudonocardineae; Pseudonocardiaceae;
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               DEHYDROQUINASE_II;
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1169
   Aromatic
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S., Hayes D.K.;
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                                      THE
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Pred. No.
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                                       TYPE-II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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acid biosynthesis; Lyase
              PARTIAL.
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                                     3-DEHYDROQUINASE
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                                       FAMILY
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AC P4271
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DT 01-NO
DT 01-NO
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Best Local S
Matches 4
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Best Local
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P42717;
01-NOV-1995 (Rel. 32, 0
01-NOV-1995 (Rel. 32, 1
01-NOV-1995 (Rel. 32, 1
                                                                                                                                                                                                                                                                                                             Neuropeptide; I
MOD_RES 16
MOD_RES 16 I
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01-FEB-1994 (Rel. 28, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
LOCUSTAPYROKININ 1 (LOM-PK-1).
LOCUSTA migratoria (Migratory locust).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda;
Pterygota; Neoptera; Orthopteroidea; Orthoptera; Cael
Acridomorpha; Acridoidea; Acrididae; Locusta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NON_TER
SEQUENCE
TISSUE=VENOM;
Toki T., Yasuhara T., Nakajima T.;
"Isolation and sequential analysis
Parapolybia indica.";
Eisei Dobutsu 39:105-111(1988).
                                                                                           Parapolybia indica.
Eukaryota; Metazoa;
                                                                                                                WASPKININ
                                                                                                                                                                                                                                                                                                                                                                                                                  Schoofs L., Holman G.M., Hayes T.K., Nachman "Isolation, primary structure, and synthesis myottropic peptide of Locusta migratoria."; Gen. Comp. Endocrinol. 81:97-104(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 91224474.
Schoofs L., Holman G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE.
TISSUE=CORPORA CARDIACA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P20404;
01-FEB-1991
                                                    SEQUENCE
                                                                       Vespoidea;
                                                                                  Pterygota;
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SIMILARITY: BELONGS
; A49761; A49761.
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                                                                       Neoptera;
Vespidae;
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                                                                      Arthropoda; Tracheata; Hexapo; Endopterygota; Hymenoptera; Polistinae; Parapolybia.
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57.1%;
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A7178BBDCA0AFDD6
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8e+02;
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locustapyrokinin:
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                    the venom
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RESULT 3
RPCH_PANBO
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P08939;
01-NOV-1988
01-FEB-1994
01-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pigment;
MOD_RES
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pandalus borealis.";
Biochim. Biophys. Acta 371:304-311(1974).
Biochim. Biophys. Acta 371:304-311(1974).
FUNCTION: THIS HORMONE ADAPTS THE ANIMAL
STIMULATING CONCENTRATION OF THE PIGMENT
CHROMATOPHORES.
-1- SIMILARITY: BELONGS TO THE AKH / HRTH / R
PIR: S07139: S07139.
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"Primary structure of two neuropeptide hormones with adipokinetic hypotrehalosemic activity isolated from the corpora cardiaca of hofiles (Diptera).";
Proc. Natl. Acad. Sci. U.S.A. 86:8161-8164(1989).
                        HTF_NAUCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fernlund P.;
"Structure of the red-pigment-concentrating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pandalus borealis (Northern red shrimp).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Caridea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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FUNCTION: THIS HORMONE, RELEASED FROM CELLS IN THE CORPORA

CARDIACA AGTER THE BEGINNING OF FLIGHT, CAUSES RELEASE OF

DIGLYCERIDES FROM THE FAT BODY AND THEN STIMULATES THE FLI

MUSCLES TO USE THESE DIGLYCERIDES AS AN ENERGY SOURCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PIGMENT CONCENTRATING HORMONE (RPCH).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A33995.
A33995, A33995.

PRO02047;

PRPO; IPR002047;

JTTE; PS00256; AKH; 1.

PYRROLIDONE CARBOXYLIC PYRROLIDONE.
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                                                                                                                                                                                                                                                                                                                 Similarity
3; Conserv
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3; Conservative (
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S00256; AKH; 1.
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(Rel. 40,
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llarity 100.0%;
Conservative
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                        STANDARD;
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                        PRT;
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             RESULT 5
HTF_TABAT STAN
ID HAFE_TABAT STAN
AC P14596;
DT 01-FEB-1990 (Rel. 1
DT 01-FEB-1994 (Rel. 2
DT 01-FEB-1994 (Rel. 2
DT 01-FEB-1994 (Rel. 2
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Best Local S
Matches 3
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Veenstra J.A., Camps F.;
Veenstra J.A., Camps F.;
Veenstra J.A., Camps F.;
Structure of the hypertrehalosemic neuropeptide of the Germ Cockroach, Blattella germanica.";
Cockroach, Blattella germanica.";
Neuropeptides 15:107-109(1990).

-1- FUNCTION: HYPERTREHALOSAEMIC FACTORS ARE NEUROPEPTIDES
-1- FUNCTION: HYPERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P10939;
01-JUL-1989 (Rel. 1
01-FEB-1994 (Rel. 2
01-NOV-1997 (Rel. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Neuropeptide;
MOD_RES 1
SEQUENCE 10
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Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Orthopteroidea; Dictyoptera; Blattaria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUL-1989 (Rel. 11, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
01-NOV-1997 (Rel. 38, Last sequence update)
01-NOV-1997 (Rel. 38, Last annotation update)
HYPERTREHALOSAEMIC HORMONE (HTM) (HYPERTREHALOSAEMIC NEUROPEPTIDE).
Nauphoeta cinerea (Cinereous cockroach) (Gray cockroach),
Leucophaea maderae (Madeira cockroach),
Elattella germanica (German cockroach), and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIR;
PIR;
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along the control of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Amino acid sequence of a hypertrehalosaemic neuropeptide corpus cardiacum of the cockroach, Nauphoeta cinerea."; Biochem. Biophys. Res. Commun. 141:774-781(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PIR;
PIR;
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Gaede G., Rinehar
                    HYPERTREHALOSAEMIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INTERPRO; IPRO02047; -. PROSITE; PS00256; AKH; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                          11 PGW 13
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R; A26381; A26381.

(R; S08997; S08997.

(R; S08998; S08988;

(R; S09137; S09137.

(R; A60421; A60421.
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                                                                                                                                                                                                                                                                                                                                            PGW
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3; Conser
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nilarity 100.0%;
Conservative
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                                                                                                                                                                           STANDARD;
13, Created)
28, Last sequence update)
28, Last annotation update)
28, Cast annotation update)
C FACTOR (HOTH) (DIPTERAN CORPORA CARDIACA FACTOR II)
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AMIDATION.
056236786775B9C4 CRC64;
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3.4e+02;
hes 0;
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109
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LANA_ACTLG
CAT1_FASHE
COG1_PARCM
UH11_RAT
GON1_PETVA
GON1_PETVA
GON3_ONCKE
GONL_SQUAC
RS19_ELYED
FARB_ASCSU
NEUT_RANTE
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Q20G_COMTE
CXET_CONTE
CHH3_BOMMO
CRTC_SPIOL
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HTF_TABAT
AROQ_AMYME
LPK1_LOCMI
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 NPA_BOVIN
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5 tabanus atr
9 pandalus bo
9 nauphoeta c
6 tabanus atr
0 amycolatops
4 locusta mig
7 parapolybia
1 parapolybia
1 parapolybia
1 parapolybia
3 ascaris suu
6 rana tempor
8 clover prol
8 loofah witc
7 methanobact
6 bos taurus
1 equus cabal
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oncorhynchu
squalus aca
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actinoplane
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paralithode
rattus norv
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spinacia ol
methanobact
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RESULT AKH_TA AKH_TA AC AD AC AD AC AD AC AD AC AD AC AD AC	Query Best Match Qy Db	S S S S S S S S S S S S S S S S S S S	SUL P3_	
BAT KH TABAT 14595; 1-JAN-1990 (Rel. 13, Creat 1-FEB-1994 (Rel. 28, Last 1-FEB-1994 (Rel. 28, Last 1-FEB-1994 (Rel. 28, Last DIPOKINETIC HORMONE (AKH) DECC I). BOCC I)	Match 25.7%; Sco Local Similarity 83.3%; Press 5; Conservative 0; 7 GEREPG 12 2 GERAPG 7	Metazoa; Arthropoda; T Meoptera; Orthopteroid a; Blaberidae; Leucopha gur. 7053012. , Naessel D.R.; , Naessel D.R.; , Of five tachykinin-rel ach Leucophaea madera: t. 65:185-196(1996). ON: MYOACTIVE PEPTIDE. NYANEOUS CONTRACTIONS A SPECIFICITY: BINIDARITY T RITY: SOME SIMILARITY T ; Neuropeptide; Amidati 19 19 19 19 99B5	LT 1 LEUMA STANDARD; PRT; P81735; P81735; 30-MAY-2000 (Rel. 39, Created) 30-MAY-2000 (Rel. 39, Last sequence up 30-MAY-2000 (Rel. 39, Last annotation TACHYKININ-RELATED PEPTIDE 3 (LEMTRP 3) Leucophaea maderae (Madeira Cockroach) Leucophaea	4 19 17.4 19 1 PYR 5 19 17.4 20 1 COG 6 18 16.5 8 1 AKH 7 18 16.5 8 1 HTF 9 18 16.5 8 1 HTF 10 16.5 8 1 HTF 11 16.5 8 1 HTF 11 16.5 8 1 UFO 2 18 16.5 10 1 CAE 3 18 16.5 10 1 HTF 4 18 16.5 10 1 HTF 5 18 16.5 11 1 BRK
PRT; 8 AA. sequence update) sequence update) (DIPTERAN CORPORA CARDIACA FACTOR I) oda; Tracheata; Hexapoda; Insecta; erÿgota; Diptera; Brachycera; Tabanomorpha;	re 28; DB 1; Length 19; d. No. 1.5e+02; Mismatches 1; Indels 0; Gaps	a; Trachedta; Hexapoda; Insecta; roidea; Dictyoptera; Blattaria; ophaea. -related peptides from the midgut of ra: existence of N-terminally extended - DE. INCREASES THE AMPLITUDE AND FREQUENCY NS AND TONUS OF HINDGUT MUSCLE. TY TO TACHYKININS. dation. dation. 99B5471A011625E5 CRC64;	; 19 AA. De update) tion update) fRP 3).	B_PSEFL 1_CHIOP 1_CHIOP 2_LIBAU 1_CHIOP 2_LIBAU 1_N_MACEU 1_PERAM 1_PERAM 2_PERAM 2_PE

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hypertrehalosemic neuropeptide Bld-HrTH - cockroach (Gromphadorina portentosa)
C:Species: Gromphadorina portentosa
C:Species: Gromphadorina portentosa
C:Date: 30-Jun-1992 #sequence_revision 14-Sep-1994 #text_change 24-Oct-1997
C:Accession: $08997
C:Accession: $08997
R:Gaede, G.; Rinehart, K.L.
Biol. Chem. Hoppe-Seyler 371, 345-354, 1990
A:Title: Primary structures of hypertrehalosaemic neuropeptides isolated from the corpor entalis and of the stick insect Extatosoma tiaratum assigned by tandem fast atom bombarc A;Reference number: $08995; MUID:90253659
A:Accession: $08997
A:Molecule type: protein
A:Residues: 1-10 <a href="https://dated.carboxylend">A:Accession: $08997
A:Modified site: pyrrolidone carboxylend (Gin) #status experimental
F:1/Modified site: amidated carboxylend (Thr) #status experimental
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A;Residues: 1-10 <VEE>
R;Gaede, G; Rinehart, K.L.
Biol. Chem. Hoppe-Seyler 371, 345-354, 1990
A;Ritle: Primary structures of hypertrehalosaemic neuropeptides isolated from the corpor entalls and of the stick insect Extatosoma tiaratum assigned by tandem fast atom bombard A;Reference number: S08995; MUID: 90253659
A;Accession: S09137
A;Molecule type: protein
A;Residues: 1-10 <GAE>
C;Superfamily: adipokinetic hormone
C;Superfamily: adipokinetic hormone
C;Superfamily: adipokinetic hormone
C;Superfamily: adipokinetic hormone; neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxyl end (Thr) #status experimental
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Best Local Similarity
""" rehes 3; Conserva
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N;Alternate names: Blad-HrTH
C;Species: Blad-tella germanica (German cockroach)
C;Date: 03-Feb-1993 #Sequence_revision 03-Feb-1993 #text_change 31-Oct-1997
C;Accession: A60421; S09137
R;Veenstra, J.A.; Camps, F.
Neuropeptides 15, 107-109, 1990
A;Title: Structure of the hypertrehalosemic neuropeptide of the German cockroach, Blatte
A;Reference number: A60421; MUID:91179584
A;Accession: A60421
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A;Accession: A43405
A;Molecule type: protein
A;Residues: 1-10 <VEN>
C;Superfamily: 6-phosphofructo-2-kinase / fructose-2,6-bisphosphate 2-phosphatase; phosp
C;Keywords: phosphoric monoester hydrolase; phosphotransferase
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Pred. No. 7.4e+02;
1; Mismatches 0
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Query Match
22.0%; Score 24; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.4e+02;
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
Oy 11 PGW 13
Db 6 PGW 8
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Search completed: Job time: 271 sec

December 21,

2000, 08:30:07

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C; Keywords: a
F; 1/Modified
F; 8/Modified
                                                                                                                                                                                               R; Jaffe, H.; Raina, A.K.; Riley, C.T.; Fraser, B.A.; Nachman, Proc. Natl. Acad. Sci. U.S.A. 86, 8161-8164, 1989
A; Title: Primary structure of two neuropeptide hormones with a Reference number: A33995; MUID:90046758
                                                                                                                                                                                                                                                                        adipokinetic hormone - black horse fly
C;Species: Tabanus atratus (black horse fly)
C;Date: 23-Mar-1990 #sequence_revision 23-Ma
C;Accession: A33995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Superfamily: adipokinetic hormone
C;Keywords: amidated carboxyl end; blocked amino end; hormone; neuropeptide;
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;8/Modified site: amidated carboxyl end (Trp) #status experimental
                                                                                                                                                 A; Molecule type: protein A; Residues: 1-8 <JAF>
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                                                                                                                                                                                     A; Accession: A33995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biochim. Biophys. Acta 371, 304-311, 1974
A;Title: Structure of the red-pigment-concentrating hormone of the shrimp,
A;Reference number: S07139; MUID:75054965
A;Accession: S07139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R; Fernlund, P.; Josefsson, L.
Science 177, 173-175, 1972
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C;Keywords: neuropeptide
                                                                 Superfamily: adipokinetic hormone; Reywords: amidated carboxyl end; corpora cardiaca; hormone; neuropeptide; IlModified site: pyrrolidone carboxylic acid (Gln) #status predicted; 8/Modified site: amidated carboxyl end (Trp) #status predicted
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 Score 24;
Pred. No.
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1.8e+05;
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RESULT 13
A43405
A5405
6-phosphofructo-2-kinase (EC 2.7.1.105) /
C:Species: Bos primigenius taurus (cattle)
C:Date: 30-Sep-1993 #sequence_revision 30-C:Accession: A43405
      R;Ventura, F.; Rosa, J.L.; Ambrosio, J. Biol. Chem. 267, 17939-17943, 1992
A;Title: Bovine brain 6-phosphofructo
                                                                                                                                                                                                                                                                                                                                                                                            C;Superfamily: adipokinetic hormone C;Keywords: amidated carboxyl end; hormone; neuropeptide; pyroglutamic ac F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental F;8/Modified site: amidated carboxyl end (Trp) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    adipokinetic hormone - damselfly (Ischnura senegalensis) C;Species: Ischnura senegalensis
C;Date: 28-Oct-1997 #sequence_revision 31-Oct-1997 #text_change 07-May-1999
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A58620
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Biochem. J. 302,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R; Janssens, M.P.E.; Kellner, R.; Gaede, G. Biochem. J. 302, 539-543, 1994
A;Title: A novel adipokinetic octapeptide A;Reference number: S55310, MUID:94379987
A;Accession: S55310
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C;Species: Pseudagrion inconspicuum
C;Date: 19-Mar-1997 #sequence_revision
C;Accession: S55310
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Best Local Similarity 100.0%;
Matches 3; Conservative (
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02, 539-543, 1994
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6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase.
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; Pred. No. 1.8e+05;
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                                       Pilkis, S.J.; Bartrons,
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RESULT 4
PH1788
T cell receptor alpha chain V region (clone 2PBL V alpha 24-4) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999
C;Accession: PH1788
R;Porcelli, S.; Yockey, C.E.; Brenner, M.B.; Balk, S.P.
J. Exp. Med. 178, 1-16, 1993
A;Title: Analysis of T cell antigen receptor (TCR) expression by human peripheral
                                                                                                                                                                                           T cell receptor alpha chain V region (clone 3PBL V alpha 24-8) - human (fragment) C;Speckes: Homo sapiens (man) C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999 C;Accession: PH1802 R;Porcelli, S.; Yockey, C.E.; Brenner, M.B.; Balk, S.P. J. Exp. Med. 178, 1-16, 1993 A;Title: Analysis of T cell antigen receptor (TCR) expression by human peripheral
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R;Conlon, J.M.; Olson, K.R.
R;Conlon, J.M.; Olson, K.R.
FEBS Lett. 334, 75-78, 1993
A;Title: Purification of a vasoactive peptide related to lysyl-bradykinin from trout plana; Reference number: $39030; MUID:94039817
A;Accession: $39030
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-10 <CON>
                                                                                            A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-17 <POR:
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A;Accession: PH1802
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Best Local Similarity
""" hes 5; Conserv
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A;Accession: PH1788
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-15 <POR>
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Best Local Similarity
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C:Species: Oncorhynchus mykiss (rainbow trout)
C:Date: 19-May-1994 #sequence_revision 19-Apr-1996 #text_change 19-Apr-1996
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C;Species: Oncorhyn
                        Query Match
Best Local
                                                                                              Molecule type: mRNA
Residues: 1-17 <POR>
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                        22.9%;
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1; Mismatches
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                    Score 25;
Pred. No.
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3.7e+02;
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8.8e+02;
                                     Length 17;
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Biochem. Blophys. Res. Commun. 167, 273-279, 1990
A;Title: A molluscan neuropeptide related to the crustacean hormone, RPCH A;Reference number: A34626; MUID:90179762
A;Accession: A34626
A;Status: preliminary
A;Molecule type: protein
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Best Local Similarity
Thes 5; Conserv
                                                                                                        C;Accession: A34626
R;Kuroki, Y.; Kanda, T.; Kubota,
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A; Molecule type: mRNA
A; Residues: 1-17 <POR>
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RESULT 6
pH1822
T cell receptor alpha chain V region (clone 5PBL V alpha 24-5) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999
C;Accession: pH1822
R;Porcelli, S:; Yockey, C.E.; Brenner, M.B.; Balk, S.P.
J. Exp. Med. 178, 1-16, 1993
. m::lo. haalvsis of T cell antigen receptor (TCR) expression by human peripheral
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A; Accession: PH1822
    Conservative
                          22.9%;
  0,
                        Score 25; DB 2;
Pred. No. 8.8e+02;
  Mismatches
                                              Length 17;
0;
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Gaps
0;
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K;Turpett, G.R.; Hoj, P.B.; Horne, R.; Mee, B.J.
Infect. Immun. 60, 5259-5266, 1992
A;Title: Purification and characterization of the
A;Reference number: A49215; MUID:93084378
A;Accession: F49215
A;Status: preliminary
A,Molocolity RPCH-related neuropeptide - ferruginous spindle C;Species: Fusinus ferrugineus (ferruginous spindle) C;Date: 06-Jul-1990 #sequence_revision 06-Jul-1990 # A;Molecule type: protein A;Residues: 1-18 <TUR> A;Residues: 1-18 <TUR> A;Note: sequence extracted from NCBI backbone (NCBIP:119487) C;Superfamily: urease 26K chain; urease 11K chain homology; urease 12K chain homology C;Keywords: hydrolase urease (EC 3.5.1.5) small chain UreA - Helicobacter mustelae (ATCC 43772) (fragment) c;Species: Helicobacter mustelae C;Date: 19-Dec-1993 #sequence_revision 25-Apr-1997 #text_change 30-May-1997 C;Accession: F49215 R;Turbett, G.R.; Hoj, P.B.; Horne, R.; Mee, B.J. Local Similarity 50.0 ses 4; Conservative 22.9%; 2 Score 25; Pred. No. و . 3.4e+02; 2; urease enzymes #text_change 31-Dec-1993 Length 18; 0 of Helicobacter Gaps 0, spec

1, I.; Fujisawa, Y.; Ikeda, T.; Miura, 167, 273-279, 1990

A.; Minamitake

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Result
No.
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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| length: 20
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Match
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A633995

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ches 6; Conservative 0; Mismatches 4 HLOGEREP 11 1	mber: PH1754; MUID:93301585 H1790 H1790 e: mRNA 16 <por> 27.5%; Score 30; DB 2; imilarity 75.0%; Pred. No. 1.3e+0</por>	RESULT 2 PH1790 PH1790 T cell receptor alpha chain V region (clone 2PBL V C; Species: Homo sapiens (man) C; Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 C; Accession: PH1790 R; Porcelli, S.; Yockey, C.E.; Brenner, M.B.; Balk, J. Exp. Med. 178, 1-16, 1993 A; Title: Analysis of T cell antigen receptor (TCR)	Ouery Match Best Local Similarity 57.1%; Pred. No. 1e+02; Matches 4; Conservative 2; Mismatches Oy 9 REPGWIK 15 : : Db 4 KEDGWVK 10	RESULT 1 G02018 G02018 proteasome chain LMP7 - human (fragment) C;Species: Homo saptens (man) C;Date: 21-Dec-1996 #sequence_revision 06-Jun-1997 C;Accession: G02018 R;Kim, T. submitted to the EMBL Data Library, July 1995 A;Reference number: G09054 A;Accession: G02018 A;Recession: G02018 A;Residues: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: DNA A;Residues: 1-18 <kim> A;Residues: 1-18 <kim> A;Genetics: A;Genetics: A;Genetics: A;Genetics: A;Genetics: LMP7 C;Superfamily: multicatalytic endopeptidase complex</kim></kim>	ALIGNMENTS	30 23 21.1 18 2 S71592 31 23 21.1 19 2 S78426 32 20.2 9 2 S78426 33 22 20.2 9 2 G56979 34 22 20.2 11 2 D56979 35 22 20.2 11 2 P00776 36 22 20.2 12 2 P00776 37 22 20.2 13 2 A28505 38 22 20.2 14 2 PH1347 40 22 20.2 14 2 PH1311 40 22 20.2 14 2 PH1321 40 22 20.2 14 2 PH1321 41 22 20.2 14 2 PH1321 42 20.2 14 2 PH1321 43 22 20.2 14 2 PH1321 44 22 20.2 14 2 PH1305 45 22 20.2 15 2 PH1310
2; Indels 0; Gaps 0;	Length 16;	alpha 24-6) - human (fragment) #text_change 16-Jul-1999 S.P. expression by human peripheral	Length 18; 1; Indels 0; Gaps 0;	997 #text_change 22-Jun-1999 DDBJ PIDN:AAA80234.1; PID:g1045469		serine proteinase Ig heavy chain DJ 52.5% protein - sp collagen alpha 1(I collagen alpha 1(I NIPSNAP2 protein - NADH dehydrogenase neurotensin-like p Ig heavy chain DJ

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RESULT 14 PCT-US95-09262-13

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PCT-US95-09262-13
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                                                                                                                                                                                                                                    TELEX: 25-3856
ENFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATA:
PRIOR APPLICATION DATA:
08/093,202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/3/2,***

FILING DATE: 13-JAN-95

PRIOR APPLICATION DATA:

PRIOR APPLICATION NUMBER: 08/306,473
                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/030,644
FILING DATE: 12-MAR-93
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APPLICATION NUMBER: 08/209,762
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APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-94
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                                                                                                                                                                 MOLECULE TYPE: peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                   LENGTH: 14 ammino acid
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CITY: Chicago
STATE: Illinoi:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release
                               NAME/KEY: Modified-site LOCATION: C-Terminus OTHER INFORMATION: /labe
               OTHER INFORMATION:
                                                                                                           NAME/KEY: misc_feature
OTHER INFORMATION: "XM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08 FILING DATE: 15-JUL-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 14-JAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 08, FILING DATE: 15-SEP-94
                                                                                                                                                                                                                                                                                                                                                                      NAME: Borun, Michael F. REGISTRATION NUMBER: 25,447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: PCT/US95/09262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE:
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RY: United States of America
60606-6402
                                                                                                                                                                                                                        14 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Floppy disk
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             /label= Amidation
/note= "The C-Terminus is Amidated"
                                                                                                           "XMP.38"
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South Wacker Drive
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Вb
                           QУ
                                                                                                                                       ; LOCATION: C-Terminus
; OTHER INFORMATION: /label= Amidation
; OTHER INFORMATION: /note= "The C-Terminus is Amidated US-08-621-803-227
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
COUNTRY:
COUNTRY:
COUNTRY:
COMPUTER 60606-6402

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
COUNTRY TO THE Release #1.0, Version #1
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole,
STREET: 6300 Sears Tower, 233
                                                                                                                                                                                                    FEATURE: NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 22-MAR-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Better, Marc D. TITLE OF INVENTION: Method TITLE OF INVENTION: Fusion
                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                            Local Similarity hes 5; Conserv
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TELEFAX: 312/474-0448
TELEX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Borun, Michael F
REGISTRATION NUMBER: 2
                             12 GWIKQLF 18
                                                                                                                                                                                                                                    OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                               TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12 GWIKQLF 18
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1 GWLIQLF 7
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o. 5851802
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71.4%;
                                                                           28.4%; 71.4%;
                                                                                                                                                                                                                                    "XMP.388"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          25,447
                                                            1; Mismatches
                                                                       Score 31;
Pred. No.
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South Wacker Drive
                                                                           DB
26;
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                                                                                        Length 10
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                                                            Indels
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                                                         Gaps
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Search completed: December 21, 2000, 08:31:49 Job time: 372 sec

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Query Match
Best Local Similarity
Watches 5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 312-715-1234
TELEX: 910-221-5317
INFORMATION FOR SEQ ID NO: 4/
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 40, Application PC/TUS9500498 GENERAL INFORMATION:
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER ERADABLE FORM:
COMPUTER Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 35,303
REFERENCE/DOCKET NUMBER: 93
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-715-1000
TELEFAX: 312-715-1234
                                                                 NAME: Rin-Laures, Li-Hsien REGISTRATION NUMBER: 33,547 REFERENCE/DOCKET NUMBER: 27129/32415 TELECOMMUNICATION INFORMATION:
                                                                                                                                  APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/183,222
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                 APPLICATION NUMBER: 08/209,762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: AN TITLE OF INVENTION: MA NUMBER OF SEQUENCES: 2 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Noonan, Kevin E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
       TELEFAX: 31.,
                  TELEPHONE: 312/7-.
TELEPHONE: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 6300 9
CITY: Chicago
STATE: Illino:
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||: |||
                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 08/273,540
                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Noonan, Kevin E
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                United States of America
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237
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Pred. No.
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18;
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; NAME/KEY: misc_feature; OTHER INFORMATION: "XMI PCT-US95-00656-40
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Best Local S
Matches 5
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                                                                                                                                                            INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/209
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/183
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: United States of America
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                        FEATURE:
                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                       TELEFAX: 312/4
TELEX: 25-3856
                                                                                                                                                                            TELEPHONE: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12 GWIKQLF 18
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                                                                                        TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                               REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 71.4 ies 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 GWLAQLF 11
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                                                                                                                                                                                                                                                                                                                                                                                      08/209,762
                                                                                                                                                                                                                                                                                                                                    08/183,222
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                                                                                                                                                                                                                                                             33,547
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Query Match
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Matches 5; Conserv

Conservative

30.38;

Score 33; DB 4; Pred. No. 18; 1; Mismatches

1;

0;

Gaps

0

Length 14; Indels

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OTHER INFORMATION: /label= Amidation;
OTHER INFORMATION: /note= "The C-Terminus is Amidated."
US-08-621-259A-13
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US-09-119-263-40
                                                                                                                                                                   Sequence 40, Applicat patent No. 6054431 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                             Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/621,259A FILING DATE: 21-MAR-1996 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/504,841 FILING DATE: 20-JUL-1995 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 11:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/707-8889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
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TTTY: Chicago

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                                               APPLICANT: Horwitz, Arnold H.
APPLICANT: Lambert, Lewis H.
APPLICANT: Little, Roger G.
TITLE OF INVENTION: Anti-Gram-Positive Bacterial Methods
TITLE OF INVENTION: Materials
NUMBER OF SEQUENCES: 237
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: McNicholas, Janet M. REGISTRATION NUMBER: 32,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                           12 GWIKQLF 18
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les 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: Modified-site
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OTHER INFORMATION: "XMP.38"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENGTH:
              STREET:
                              ADDRESSEE:
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Chicago
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                                                                                                                                                                                                     Application US/09119263
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Lim, Edward
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              E: Marshall, O'Toole, Gerstein, Murray & 6300 Sears Tower, 233 South Wacker Drive
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
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                                                                                                                                                                                                                                                                                                                                                                               Score 33;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                  Length 14
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; NAME/KEY: misc_feature; OTHER INFORMATION: "XMI US-09-119-263-40
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Best Local Similarity
Thehes 5; Conserv
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                                                                                                                                                                                                                                                                                                                  PCT-US94-02465-40
                                                                                                                                                                                                                                                                                                                                 RESULT 11
                                                                                                                                                                                                                                                                               Sequence 40, Application PC/TUS9402465 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 2712
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                  TITLE OF INVENTION: ITITLE OF INVENTION: ITITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/20
FILING DATE: 11-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 11-MAR-PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE:
ZIP: 60606

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                12 GWIKQLF 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                   CITY: Chicago
STATE: Illino:
                                                                                                  COUNTRY:
                                                                                                                                                  STREET:
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5 GWLAQLF 11
                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           i: 14 amino acids
amino acid
                                                                                                                   Illinois
                                                                                                                                                E: Allegretti & Witcoff, Ltd.
10 South Wacker Drive, Suite 3000
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                                                                                                   USA
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                                                                                                                                                                                                                 Biologically Active Peptides from Functional Domains of Bactericidal/Permeability-Increasing Protein and Uses Thereof
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Pred. No.
        Version #1.25
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18;
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: NAME/KEY: Modified-site
:/ LOCATION: C-Terminus
: OTHER INFORMATION: /labe
:/ OTHER INFORMATION: /note
US-08-621-803-39
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Best Local Similarity
Thes 5; Conserve
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; OTHER INFORMATION: "BPI.38"
US-08-473-344-40
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino Types
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                                                                                                                                                                                                                                                        TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/621,803
FILING DATE: 22-MAR-1996
                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
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TITLE OF INVENTION: Meth
TITLE OF INVENTION: Fusi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION: NAME: Borun, Michael F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                             EATURE:
                                                                                                                                                                  MOLECULE TYPE:
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                                                                                                          NAME/KEY: misc_feature
OTHER INFORMATION: "XM
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CITY: Chicago
                                                                                                                                                                                  TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                   NAME: Borun, Michael F. REGISTRATION NUMBER: 25,447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12 GWIKQLF 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 GWLAQLF 11
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                                                                                                                                                                 peptide
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71.4%;
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             /label= Amidation
/note= "The C-Terminus
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Query Match

30.3%;

Score 33;

DB 2;

Length 14;

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RESULT 9
US-08-621-259A-13
; Sequence 13, Application US/08621259A
; Patent No. 5858974
; GENERAL INFORMATION:
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Best Local Similarity
Matches 5; Conserv
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APPLICANT: Little
                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/209,762
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FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOTTWARE: PATENTIN Release #1.0, CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
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CITY: Tilinois
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 312-707-9155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: McNicholas, Janet M.
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 11018US08/100-224.P4.C1B
                                                                                                                                                     12 GWIKQLF 18
                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature
OTHER INFORMATION: "BP
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                                                                                                                                                                                         Conservative
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Biologically Active Peptides from Functional Domains of Bactericidal/ Permeability-Increasing Protein and Uses Thereof
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Pred. No.
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; NAME/KEY: misc_feature; OTHER INFORMATION: "BP US-08-306-473A-40
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Best Local Similarity
Thehes 5; Conserve
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                                                                                                                                                                                                                                                       Sequence 40, Application US/08209762 Patent No. 5733872
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INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                            GENERAL INFORMATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA: 08/183,222
APPLICATION NUMBER: 08/183,222
APPLICATION NUMBER: 14-JAN-1994
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MEDIUM TYPE: Floppy disk
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APPLICATION NUMBER: 08/2
FILING DATE: 11-MAR-1994
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TELEPHONE: 312-715-1000
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ATTORNEY/AGENT INFORMATION:
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FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                 APPLICANT: Little, Roger G.
TITLE OF INVENTION: Biologically Active Peptides from
TITLE OF INVENTION: Functional Domains of Bactericidal/Permeability-Increasing
TITLE OF INVENTION: Protein and Uses Thereof
NUMBER OF SEQUENCES: 98
                                                                                                                                        CORRESPONDENCE ADDRESS:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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REFERENCE/DOCKET NUMBER: 93,1133-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: linear
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5 GWLAQLF 11
                                                 COUNTRY:
                                                                                   CITY: Chicago
                                                                                                    STREET:
                                                                                                                    ADDRESSEE:
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Suite 3000, 10 S. Wacker Drive
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                                                                   Illinois
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                                                                                                  E: Allegretti & Witcoff, Ltd.
10 South Wacker Drive, Suite 3000
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Pred. No. 18;
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OTHER INFORMATION: "BP7
US-08-209-762-40
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Best Local Similarity
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APPLICANT: Little
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                   APPLICATION NUMBER: US 08/306,473
ETLING DATE: 15-SEP-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/209,762
ETLING DATE: 11-MAR-1995
ATTORNEY/ACENT INFORMATION:
NAME: MCDONNell J.
NAME: MCDONNell J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: NO. 5733872nan, Kevin REGISTRATION NUMBER: 35,303 REFERENCE/DOCKET NUMBER: 93, TELECOMMUNICATION INFORMATION: TELEPHONE: 312.715-1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
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LENGTH: 14 amino acids
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TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                         APPLICATION DATA:
FILING DATE: 7-JUN 1..
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/306,473
APPLICATION NUMBER: 15-SEP-1995
The control of the contro
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Little, Roger G
TITLE OF INVENTION: Biologically Active Peptides from
TITLE OF INVENTION: Functional Domains of Bactericidal/Permeability-Increasing
TITLE OF INVENTION: Protein and Uses Thereof
NUMBER OF SEQUENCES: 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
REGISTRATION NUMBER: 26,949
REFERENCE/DOCKET NUMBER: 93,1133-J
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-715-1000
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South Wacker Drive, Suite 3000
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Pred. No. 18;
1; Mismatches
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Query Match
Best Local Similarity
Thes 5; Conserva
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; OTHER INFORMATION: "XMP.38"
US-08-372-783-40
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Best Local Similarity 71.4
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/183,222
FILING DATE: 14-JAN-1994
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                   NAME: Rin-Laures, Li-Hsien REGISTRATION NUMBER: 33,547 REFERENCE/DOCKET NUMBER: 27: TELECOMMUNICATION INFORMATION: TELEFAX: 312/474-6300 TELEFAX: 312/474-0448
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FILING DATE:
PRIOR APPLICATION DATA:
08/273,540
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/372,783
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT: Little, Roger G.
TITLE OF INVENTION: Anti-Gr
TITLE OF INVENTION: Materia
                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                          MOLECULE TYPE:
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NAME: Rin-Laures, Li-Hsi
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    12 GWIKQLF 18
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6300 Sears Tower,
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Pred. No.
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Pred. No.
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18;
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Matches
APPLICANT:
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US-08-306-473A-40; Sequence 40, Application US/08306473A; Patent No. 5652332; GENERAL INFORMATION:
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US-08-372-105-40
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Patent No. 5627
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INFORMATION FOR SEQ ID NO:
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FILING DATE:
FRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273
APPLICATION NUMBER: 11-7UL-1994
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION UMBER: 08/209
EILING DATE: 11-MAR-1994
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APPLICANT:
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APPLICATION NUMBER: 08/1
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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LENGTH: 14 amino acids
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                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
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TITLE OF INVENTION: Anti-Fungal Materials and Methods
NUMBER OF SEQUENCES: 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                     12 GWIKQLF 18
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7TP: 60606-6402
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CITY: Chicago
STATE: Illinois
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                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
TOPOLOGY: linear
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REFERENCE/DOCKET NUMBER: 27129/32415
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Little, Roger G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312/474-0448
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South Wacker Drive
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36, Appl 45, Appl 45, Appl 86, Appl 89, Appl 91, Appl 106, App 107, App 109, App 112, App 112, App 112, App 112, App 114, Appl 115, Appl 115, Appl 116, Appl 117, Appl 118, Appl 119, Appl

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Post-processing: Minimum Match
Maximum Match
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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1: /cgn2_6/ptodata4/2,
2: /cgn2_6/ptodata4/2,
3: /cgn2_6/ptodata4/2,
4: /cgn2_6/ptodata4/2,
5: /cgn2_6/ptodata4/2,
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Match
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Gapop 10.0 , Gapext 0.5
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US-08-372-783-40
US-08-372-105-40
US-08-306-473A-40
US-08-209-62-40
US-08-621-803-39
US-08-621-803-39
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US-08-621-803-331
US-08-311-611A-33
US-08-311-611A-33
US-08-311-611A-35
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APPLIATION UMBER: 08/125,65
FILING DATE: 22-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REFERENCE/DOCKET NUMBER: 3225
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPHONE: 312/474-6300
TELEPHONE: 312/474-0448
                                                                                                        INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Cohen, Jonathan
APPLICANT: Kung, Ada H.C.
APPLICANT: Lambert, Jr., Lewis H.
APPLICANT: Lambert, Jr., Lewis H.
TITLE OF INVENTION: Method for Treating Gram-Negative Bacterial
TITLE OF INVENTION: Infection by Administration of
TITLE OF INVENTION: Bactericidal/Permeability-Increasing
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                              ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TWPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 227
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/2 FILING DATE: 11-JUL-1994 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Mars
STREET: 6300 Se
CITY: Chicago
STATE: Illinois
COUNTRY: USA
                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                          FEATURE:
                                                     MOLECULE TYPE: peptide
                                                                                                                         TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE:
              NAME/KEY: misc_feature OTHER INFORMATION: "BP
                                                                     TOPOLOGY:
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                  "BPI.38"
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US-08-311-611A-44

US-08-311-611A-45

US-08-311-611A-81

US-08-311-611A-91

US-08-311-611A-91

US-08-311-611A-107

US-08-311-611A-107

US-08-311-611A-109

US-08-311-611A-122

US-08-311-611A-122

US-08-311-611A-123

US-08-372-783-33

US-08-372-783-33

US-08-372-783-34

PCT-US95-09262-62
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RP MEDILINE; 95105146.

RA MEDILINE; 95105146.

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RA Flynn T.R., Hollenberg FROM N., Wondisford F.E.;

RA Flynn T.R., Hollenberg FROM N., Wondisford F.E.;

RA Flynn T.R., Hollenberg FROM N., Wondisford F.E.;

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RA Flynn T.R., Hollenberg FROM N., Cohen O., Menke J.B., Usala S.J.,

RA Flynn T.R., Hollenberg FROM N., Cohen O., Menke J.B., Usala S.J.,

RA Flynn T.R., Hollenberg FROM N., World F.E.;

RA Flynn T.R., World FROM N., World F.E.;

RA Flynn T.R., W
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C Q9TS18
C Q9TS18
C Q9TS18;
T 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 14, Last sequence updated)
DT 01-JUN-2000 (TrEMBLrel. 14, Last annotation upd DE CYTOTOXIN-BINDING PROTEIN (FRAGMENT).
OS Oryctolagus cuniculus (Rabbit).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertet Mammalia; Eutheria; Lagomorpha; Leporidae; Or
   RESULT 13
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ID 008806
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SEQUENCE 20 AA;
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01-JUN-2000 (TrEMBLrel. 14, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
CHLOROPLAST 30S RIBOSOMAL PROTEIN S15 (FRAGMENT).
Spinacia oleracea (Spinach).
Chloroplast.
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Lutz F., Mohr M., Grimmig M., Leidolf R., Linder D.;

"Pseudomonas aeruginosa cytotoxin-binding protein in rabbit erythrocyte membranes. An oligomer of 28 kDa with similarity transmembrane channel proteins.";

Eur. J. Biochem. 217:1123-1128(1993).

SEQUENCE 20 AA; 2414 MW; 40B82D7DB5283DZD CRC64;
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01-MAY-1997
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01-AUG-1998
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O9UD41;
O1-MAY-2000 (TrEMBLrel. 13,
O1-MAY-2000 (TrEMBLrel. 13,
O1-JUN-2000 (TrEMBLrel. 14,
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01-JUL-1997 (TrEMBLrel. 04, C
01-JUL-1997 (TrEMBLrel. 04, L
01-NOV-1999 (TrEMBLrel. 12, L
SERINE PROTEASE INHIBITOR 14
                          BETA-ISOFORM THYROID HORMONE
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          Eukaryota; Metazoa;
                 Homo sapiens (Human)
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                                                                                                                                                                                                                                                                       Mammalia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mammalia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus
                                                                                                                                                                                                                                                                                       Homo sapiens (Human)
                                                                                                                                                                                                                                             Johansson M., Karlsson A.;
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                                                                                                                        11 KLFLSLL 17
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5; Conser
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Chem. 0:0-0(0).
96709; AAB57821.1; -.
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; metazoa; Chordata;
Eutheria; Rodentia;
                                                                                                                                                                                                                                                                       Eutheria;
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                                                                                                                                                                                                                                                                               Metazoa;
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(TrEMBLrel. 03, Last sequence update)
(TrEMBLrel. 07, Last annotation update)
(TREMBLREL. 07, Last annotation update)
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Last annotation update)
[4] (SERINE PROTEINASE INHIBITOR MNK26)
                                  Last sequence update)
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Catarrhini;
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Catarrhini;
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Sciurognathi; Muridae;
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2.9e+03;
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i; Hominidae; Homo.
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Hominidae;
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        Euteleostomí;
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O9R4E9;
O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
COA THIOESTERASE (FRAGMENT).
Rhodopseudomonas palustris.
Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group;
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SEQUENCE
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KUVET J., XU Y., Gibson J.;

Metabolism of cyclohexane carboxylic acid by metabolism of cyclohexane balustris.";

bacterium Rhodopseudomonas palustris.";

Arch. Microbiol. 164:337-345(1995).

Arch. Microbiol. 164:337-345(1995).
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01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
01-NOV-1999 (TrEMBLrel. 12, Last annotation update)
PROBABLE N-ACETYLMURAMOYL-L-ALANINE AMIDASE (EC 3.5.1.28) (FRAGMENT).
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P78199;
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                                                                                                                                                                                           "Construction of a contiguous 874-kb sequence -K12 genome corresponding to 50.0-68.8 min on analysis of its sequence features."; DNA Res. 4:91-113(1997). EMBL; D90874; BAA16324.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-K12
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5; Conservative
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MEDLINE; 93054417.

Ezaki J., Himeno M., Kato K.;

Ezaki J., Himeno m., Kato K.;

Purification and characterization of

Purification and characterization of

1 ysosomal membranes.";

T lysosomal membranes.";

T. Biochem. 112:33-39(1992).

3 AA; 2008 MW; 8314BA
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Q56610;
01-NOV-1996 (TrEMBLIEL 0
01-NOV-1996 (TrEMBLIEL 0
01-NOV-1998 (TrEMBLIEL 0
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Best Local Similarity
Matches 4; Conserv
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NON_TER
SEQUENCE
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01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
(CA2+-MG2+)-ATPASE (FRAGMENT).
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Pred. No. 2.6e+03;
2; Mismatches 1
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Vuillaumier S., Denamur E.;

Vuillaumier S., Denamur E.;

Submitted (FEB-1996) to the EMBL/GenBank/DDBJ databases

EMBL; x95927; CA65168.1; -.

SEQUENCE 18 AA; 2158 MW; 5C5855056C1CE6DE CRC64;
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Immonen T., Wahlstroem G., Takala
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Plasmid pLEB513.
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Pred. No. 8.6e
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                    SEQUENCE FROM N.A.
STRAIN-CH210; TRANSPOSON-TN5059;
MEDLINE; 97303088.
Nikiforov V., Kholodii G., Minakhin L., Gc
Mindlin S., Nikiforov V.;
"Intercontinental spread of promiscuous me
in environmental bacteria.";
MO1. Microbiol. 24:301-329(1997).
EMBL; Y09026; CAA70241.1; -.
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01-JUL-1997;
01-JUL-1997;
01-JUL-1997;
DNA, MOSAIC N
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Q9UCH4;
Q1-MAY-2000 (
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Shau H., Gupta R.K., Golub S.H.;
"Identification of a natural killer enhancing erythroid cells.";
Cell. Immunol. 147:1-11(1993).
SEQUENCE 15 AA; 1738 MW; 4909D4A793D382BF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
NATURAL KILLER ENHANCING FACTOR, NKEF.
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Elsea S.H., Hsiung Y., Nitiss J.L.,
J. Biol. Chem. 270:1913-1920(1995).
SEQUENCE 15 AA; 2094 MW; OA6A37E
                                                                                                                                                                                                                                         006514
   SEQUENCE
                                                                                                                                        Bacteria;
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Ol-JUL-1997 (TrEMBLrel. 04, Last annotation update)
DNA, MOSAIC MERCURY RESISTANCE TRANSPOSABLE ELEMENT
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SUMMARIES

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Q1-NOV-1996 (TrEMBLrel. 01, Created)
Q1-NOV-1996 (TrEMBLrel. 01, Last sequence update)
Q1-NOV-1998 (TrEMBLrel. 08, Last annotation update)
QROTIDINE-5'-MONOPHOSPHATE DECARBOXYLASE (FRAGMENT).
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EMBL; 879674; AAB35350.1; -.
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Matches 4
                                                                                                                                                                                                                PROSITE: PS00525; RIBOSOMAL_L6_1; Ribosomal protein; rRNA-binding.
NON_TER 1 1 1 SEQUENCE 16 AA; 1935 MW. APP-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Setterquist R.A., Smith G.K., Oakley T.H., Lee Y.H., Fox 'Sequence, overproduction and purification of Vibrio protribosomal protein L18 for in vitro and in vivo studies."; Gene 183:237-242(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RL6_VIBPR STANDARD; PRT; 056715; 056715; 15-DEC-1998 (Rel. 37, Created) 15-DEC-1998 (Rel. 37, Last sequence up 15-DEC-1998 (Rel. 37, Last annotation 50S_RIBOSOMAL_PROTEIN_L6 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Arch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vibrio proteolyticus (Aeromonas proteolytica).
Bacteria; Proteobacteria; gamma subdivision; Vibrionaceae; Vibrio
                                                                                                                                                                                                                                                                                                                                                                                          entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-ATCC 15338;
MEDLINE; 97149305.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Elongation factor; Protein biosynthesis; NON_TER 15 15
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PROSITE; PS00301; EFACTOR_GTP; PARTIAL.
                                                                                                                                                                                                                                                                                                                                            EMBL; U38943; AAB41328.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                          modified and this statement is not removed.
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FUNCTION: THIS PROTEIN PROMOTES THE GTP-DEPENDENT AMINOACYL-TRNA TO THE A-SITE OF RIBOSOMES DURING F BIOSYNTHESIS (BY SIMILARITY).
SUBGELLULAR LOCATION: CYTOPLASMIC (BY SIMILARITY).
SIMILARITY: BELONGS TO THE GTP-BINDING ELONGATION EF-TU/EF-1A SUBFRAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PEPTIDYLTRANSFERASE CENTER (BY SIMILARITY).
SIMILARITY: BELONGS TO THE L6P FAMILY OF RIBOSOMAL PROTEINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: THIS PROTEIN BINDS DIRECTLY TO 23S RIBOSOMAL LOCATED AT THE AMINOACYL-TRNA BINDING SITE OF THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AKEKIHINIV 10
                                             VQASYSKKK 11
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4; Conservative
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Pred. No.
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1.3e+03;
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proteolyticus
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PHSL_DESBN
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Best Local Similarity
Matches 4; Conserv
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P13066;
01-JAN-1990
01-JAN-1990
15-DEC-1998
PERIPLASMIC
                                                                                                                                                                                                                                                                                                                                                                                                               PILINE; 88106446.

PILOKII B.C., He S.H., Li C., Menon N., Choi E.S., Przybyla Dervartanian D.V., Peck H.D. Jr., Fauque G., le Gall J., Teix Moura I., Moura J.J.G., Patil D., Huynh B.H.;

"Identification of three classes of hydrogenase in the genus, Desulfovibrio.";
                                                                                                                                              PROSITE; PS00507; NI_HGENASE_L_1; PARTIAL.

PROSITE; PS00508; NI_HGENASE_L_2; PARTIAL.

OXIGOTEQUICLASE; Periplasmic; Nickel; Selenium;

NON_TER 19 19 19

SEQUENCE 19 AA; 1942 MW; 2BFCD2D360F00367 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ol-JAN-1990 (Rel. 13, Created)
Ol-JAN-1990 (Rel. 13, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
PERIPLASMIC [NIFESE] HYDROGENASE LARGE SUBUNIT (EC 1.18.99.1)
HYDROGENLYASE LARGE CHAIN) (FRAGMENT).
Desulfovabrio baculatus (strain Norway 4).
Bacteria; Proteobacteria; delta subdivision; Desulfomicrobium.
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SIMILARITY: BELONGS TO
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                                                                                                                                                                                                                                                SUBUNIT FAMILY.
H27480; H27480.
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                                                                                                                                                                                                                                                                                                                                                                   FERREDOXIN + H(2)
                             ASYSKKKL 12
AADGKKKI
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2 REDUCED FERREDOXIN + 2
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Pred.
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                                                                 Mismatches
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Gall J., Teixei
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FRANCOS DETEN
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RIPK_TRIKI
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01-APR-1990 (Rel. 14, Created)
01-APR-1990 (Rel. 14, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
15-JUL-1999 (Rel. 38, Last annotation update)
RIBOSOME-INACTIVATING PROTEIN TRICHOKIRIN (RRNA N-GLYCOSIDASE)
(EC 3.2.22) (FRAGMENT).
Trichosanthes kirilowii (Mongolian snake-gourd).
Eukaryota: Viridiplantae: Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae; eurosids I;
Magnoliophyta; eudicotyledons; core eudicots; Rosidae; eurosids I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                     PALERS;
30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
44 KDA IMMUNOGENIC PROTEIN (FRAGMENT).
Porphyromonas gingivalis (Bacteroides gingivalis).
Bacteria; CFB group; Bacteroidaceae; Porphyromonas
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SEQUENCE
                  MEDLINE; 20198497
Norris J.M., Love
                                                    SEQUENCE.
STRAIN-VPB 3492;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       characterization and use for preparation of immunotoxins.";
Eur. J. Blochem. 176:581-588(1988).
-i- CATALYTIC ACTIVITY: ENDOHYDROLYSIS OF THE N-GLYCOSIDIC SPECIFIC ADENOSINE ON THE 28S RRNA.
-i- PTM: GLYCOSYLATED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Casellas P., Dussossoy D., Falasca A.I., Barbieri L., Guillemot J.C., Ferrara P., Bolognesi A., Cenini P., Stirpe F. Trichokirin, a ribosome-inactivating protein from the seeds Trichosanthes kirilowii Maximowicz. Purification, partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE;
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                  Love D.N.;
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1605 MW;
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EFIA_MICCR
ID EFIA_MICCR STANDARD; PRT; 15 AA.

AC P81266;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 37, Last sequence update)
DT 15-DEC-1998 (Rel. 37, Last annotation update)
DE ELONGATION FACTOR 1-ALPHA (EF-1-ALPHA) (FRAGMENT).
OS Microplitis croceipes.
OC Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; I
CC Pterygota; Metazoa; Arthropoda; Microplitis Croceipes.
OC Ichneumonoidea; Braconidae; Microgastrinae; Micropliti
RN [1]
RP SEQUENCE.
RX MEDLINE; 99033459.
RA Stuart M.K.;
RT "An antibody diagnostic for hymenopteran parasitism is homologue of elongation factor-1 alpha.";
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MAST_VESBA STAN
P21654;
01-MAY-1991 (Rel. 1
01-MAY-1991 (Rel. 1
01-AUG-1992 (Rel. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; I
Pterygota; I
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NON_TER
SEQUENCE
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SEQUENCE
                                                                                                                                     Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Pterygota; Neoptera; Endopterygota; Hymenoptera; Apov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 91174755.
Lo C.-L., Hwang L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vespa basalis (Hornet).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MASTOPARAN B.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cell degranulation; Venom; Amidation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S14336; S14336.
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3; Conservative
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                                                                                                                  tera; Endopterygota; Hymenoptera; Apocrita;
Braconidae; Microgastrinae; Microplitis.
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57.1%;
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"Structure and biological activities of a new nerm the venom of the hornet Vespa basalis."; Biochem. J. 274.453-456(1991).

-i- FUNCTION: MAST CELL DEGRANULATING PEPTIDE.
THAT COUPLE TO PHOSPHOLIPASE C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Serum antibody responses of cats to soluble version porphyromonas gingivalis."; teline porphyromonas gingivalis."; vet. Microbiol. 73:37-49(2000).
-i- SIMILARITY: TO P.GINGIVALIS HEMAGGLUTININ
                                                                                                                                                                                                                                                                                                                                                                          Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Neoptera; Endopterygota; Hymenoptera; Apocrita; Ac
Vespidae; Vespinae; Vespa.
                                                                                                    D35944CA193A19A2
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RESULT 6
RESULT 8
PA2B_VIPBO
ID PA2B_V
AC P31859
DT 01-JUL
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Best Loc
Matches
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P35451;
01-JUN-1994
01-JUN-1994
01-JUN-1994
17 KDA MILK
                                                                                                                                                                                                                                                                                                                            Kleselbach T., Bystedt M., Schroeder W.P.;
Submitted (MAY-2000) to the SWISS-PROT data bank.
-!- SUBCELLULAR LOCATION: CHLOROPLAST THYLAKOID M
Chloroplast; Thylakoid membrane.
  PA2B_VIPBO
P31859;
01-JUL-1993
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Soerensen E.S., Petersen T.E.;
Purification and characterization of three properties of the propertie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea Bovidae; Bovinae; Bos.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Magnoliophyta; eudicotyledons; core eudicots; Caryoph Caryophyllales; Chenopodiaceae; Spinacia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TL18_SPIOL STANDARD; PRT; 20 AA P82535; P82536; Created) 01-OCT-2000 (Rel. 40, Last sequence update) 01-OCT-2000 (Rel. 40, Last annotation updat THYLAKOID LUMENAL 18 KDA PROTEIN (P18) (FRA Spinacia oleracea (Spinach).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPIOL
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4 (Rel. 29, Las:
K GLYCOPROTEIN
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                                          STANDARD;
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ast annotation
(FRAGMENT).
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                                                                                                                                                                                                                   Score 21; DB
Pred. No. 1.4e
4; Mismatches
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SOUTH THE TRANSPORT OF 
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  RESULT 9
FGF1_CANFA
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SNAKES: Vipera berus.";

Biochimie 55:1031-1045(1973).

Biochimie 55:1031-1045(1973).

1- FUNCTION: PA2 CATALYZES THE CALCIUM-DEPENDENT

2-ACYL GROUPS IN 3-SN-PHOSPHOGLYCERIDES.

1- CATALYTIC ACTIVITY: PHOSPHATIDYLCHOLINE + H(2)

PHOSPHOCHOLINE + A FATTY ACID ANION.

1- SIMILARITY: BELONGS TO THE PHOSPHOLIPASE A2 FF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1990 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
HEPARIN-BINDING GROWTH FACTOR 1 (HBGF-1) (ACIDIC FIBROBLAST GROWTH FACTOR) (AFGF) (ALPHA-ENDOTHELIAL CELL GROWTH FACTOR) (FRAGMENT).
FGF1 OR FGF-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUL-1993 (Rel. 26, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
PHOSPHOLIPASE A2, BASIC (EC 3.1.1.4) (PHOSPHATIDYLCHOLINE
2-ACYLHYDROLASE) (FRAGMENT).
Vipera berus orientalis (Viper).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of a toxic A2 phospholipase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Purification and physiochemical, chemical and of a toxic A2 phospholipase isolated from the v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Delori P.J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-VENOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Viperidae;
                                                                                                                                                                                         EUR. J. BIOCHEM. 181:67-73(1989).

-II- FUNCTION: THE HEPARIN-BINDING GROWTH FACTORS ARE ANGIOGE IN VIVO AND ARE POTENT MITOGENS FOR A VARIETY OF CELL TY VITRO. THERE ARE DIFFERENCES IN THE TISSEE DISTRIBUTION CONCENTRATION OF THESE 2 GROWTH FACTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                      Owinkler W., Maasberg M., Berr
Sharma H.S., Schaper W.;
"Isolation of heparin-binding
canine hearts.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Canis familiaris (Dog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FGF1_CANFA
                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE;
                                                               PIR; S03955; S03955.
HSSP; P05230; 2AXM.
                    PROSITE;
                                           INTERPRO;
                                                                                                        THAN DOES BEGF.
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE.
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MISCELLANEOUS: TH
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); IPR002209; -.
PS00247; HBGF_FGF;
actor; Mitogen; Vas
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Metazoa;
Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viperinae; Vipera.
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                                                                                                                                                       SIHL
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  PARTIAL.
Vascularization;
                                                                                                            ТО
                                                                                                                                                       PROTEIN
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                                                                                                            THE
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Pred.
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                                                                                                                                                                                                                                                                                                                               growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata; ; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                            HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A
    Heparin-binding
                                                                                                                                                                                                                                                                                                                                   from
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venom of vi
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                                                                                                                                                       ALTHOUGH LESS STRONGLY
                                                                                                              GROWTH FACTORS FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FAMILY
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                                                                                                                                                                                                                                                                                                                                   bovine,
                                                                                                                                                                                                                                                                                                                                                                            Luethe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Euteleostomi, Canis.
                                                                                                                                                                                                                         RIBUTION AND
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CPBX_CAVPO
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Matches 4
                                                                                                                                             PROSITE; PS00086; CYTOCHROME_P450; PARTIAL.
Oxidoreductase; Monooxygenase; Electron transport; Membrane;
Microsome; Endoplasmic reticulum.
NON_TER 20 20
SEQUENCE 20 AA; 2259 MW: 78DCA1280CA270.55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CPBX_CAVPO STANDARD; PRT; 20 AA. P3403; P34033; O1-FEB-1994 (Rel. 28, Created) O1-FEB-1994 (Rel. 28, Last sequence update) 30-MAY-2000 (Rel. 39, Last annotation update)
                                                                                                                                                                                                                                                                    of P450 IIB from liver microsomes of guinea pigs";
Blochem. Blophys. Res. Commun. 172:607-613(1990).

-i- FUNCTION: CYTOCHROMES P450 ARE A GROUP OF HEME-THIOLATE
MONOXYGENASES. IN LIVER MICROSOMES, THIS ENZYME IS INVOLVED IN AN NADPH-DEPENDENT ELECTRON TRANSPORT PATHWAY. THIS ISOZYME IS ACTIVE UPON P.NITROANISOLE, ANILINE, D-BENZPHETAMINE, DELTA(9)-
TETRAHYPROCANNABINOL (THC) AND STRYCHNINE.

-i- CATALYTIC ACTIVITY: RH + REDUCED FLAVOPROTEIN + O(2) = ROH +
OXLDIZED FLAVOPROTEIN + H(2)O.

-i- SUBCELLULAR LOCATION: MEMBRANE-BOUND. ENDOPLASMIC RETICULUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cavia porcellus (Guinea pig).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Rodentia; Hystricognathi; Cavildae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE, AND CHARACTERIZATION. STRAIN-HARTLEY; TISSUE-LIVER; MEDLINE; 91054472.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Possani L.D., Alagon A.C., Fletcher P.L. Jr., Varela M.J., Jul "Purification and characterization of a phospholipase A3 from venom of the coral snake, Micrurus fulvius microgalbineus (Brosmith).";
                                                                                                                                                                                                                                                                                                                                                                                                                                            Narimatsu S., Akutsu Y., Matsunaga T., Watanabe K., Yoshimura H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOCHROME P450IIB (EC 1.14.14.1) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Biochem.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     +
                                                                                                                                                                                                                                                                                                                                                                                                                           "Purification of a cytochrome P450 isozyme belonging
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00118; PA2_HIS; PARTIAL.
PROSITE; PS00119; PA2_ASP; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 79255521
                                         12 LFLSLL 17
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SIMILARITY: BELONGS TO THE PHOSPHOLIPASE A2 FAMILY.
ERPRO; IPR001211; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FUNCTION: PA2 CATALYZES THE CALCIUM-DEPENDENT HYDROLYSIS OF THE 2-ACYL GROUPS IN 3-SN-PHOSPHOGLYCERIDES.

CATALYTIC ACTIVITY: PHOSPHATIDYLCHOLINE + H(2)0 = 1-ACYLGLYCERY
                                                                                                                                                                                                                                                         SIMILARITY: BELONGS TO THE CYTOCHROME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SLLBFK 6
           LFLALL 12
                                                                                                                                                                                                                                            A36154; A36154.
                                                                        Similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                J. 179:603-606(1979).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12 AA; 1398 MW; CC21992A899F0339 CRC64;
                                                                        Conservative
                                                                                      24.0%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 23; DB Pred. No. 3.6e 2; Mismatches
                                                                     Score 23; DB Pred. No. 6.3e. 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Venom
                                                                     DB 1; Lo
6.3e+02;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
3.6e+02;
                                                                                                                                                                                                                                                         ENDOPLASMIC P450 FAMILY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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                                                                                                  Length 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                          to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cavia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NON_TER
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                  Adamsen A.K., Jacobsen S., Submitted (OCT-1996) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Identification of Bordetella pertuss membrane proteins.";
FEMS Microbiol. Lett. 172:9-13(1999).
Outer membrane; Virulence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE:
STRAIN=TOHAMA I;
MEDLINE; 99179239.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BORPE
                                                                                                                                                                                                                        INTERPRO; IPROÓ1000; -.
PROSITE; PS00591; GLYCOSYL_HYDROL_F10; PAR
XYJan degradation; Hydrolase; Glycosidase.
NON_TER 10 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Passerini de Rossi B.N., Friedman L.E.,
Castello P.R., Franco M.A., Rossi J.P.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VIR90.
                                                                                                                                                                                                     SEQUENCE
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                                        10
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                                      KKLFLSLLD 18
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KKTILDLKD
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                                                                                                                                                                                                   10 AA; 1144 MW;
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                                                                                      Conservative
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10
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e SWISS-PROT
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Pred No. 6.8e+02;
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FILA
RIPK_TRIKI
MAST_VESBA
EFIA_MICCR
RL6_VIBPR
PHSL_DESBN
STYA_STYCL
UCAE_HUMAN
UVR0_SALTY
YPE2_LACLC
ARCD_PSEPU
UPATO_PSEPU
UPATO_PUSNU
CCKN_MACEU
TKN_ELEMO
NO40_SOYBN
MAST_VESMA
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UC34_MAIZE
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AA. te) (PHOSPHATIDYLCHOLINE coral snake). Vertebrata; Euteleostomi; rpentes; Colubroidea;	Length 18; ; Indels 0; Gaps 0;	ILE (SPOT 443) 'ta; Spermatophyta; let JC., towards an integrated I OF THIS UNKNOWN	P05975 halobacteri P81422 acinetobact P80750 cucurbita p P25423 melolontha P80430 rattus norv P13269 enterococcu P80431 rattus norv P21996 rattus norv P21996 rattus norv P21946 rattus norv P21947 p3

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RESULT 14

G22565

R. phycoerythrin gamma-B chain - red alga (Gastroclonium coulteri) (fragment)
C; Species: Gastroclonium coulteri
C; Species: 07-Mar-1988 #sequence_revision 07-Mar-1988 #text_change 23-Mar-1993
C; Accession: G22565
R; Klotz, A.V.; Glazer, A.N.
J. Blol. Chem. 260, 4856-4863, 1985
A; Ritle: Characterization of the bilin attachment sites in R-phycoerythrin.
A; Reference number: A22565; MUID:85182601
A; Accession: G22565
                                                                                                                                                                                                                                                                                                                                    A; Molecule type: protein
A; Residues: 1-14 < ROC>
A; Experimental source: endosperm
C; Superfamily: gliadin
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N:Alternate names: CIP-3; coeliac immunoreactive protein 3
C:Species: Avena sativa (oat)
C:Date: 19-Mar-1997 #sequence_revision 24-Jul-1998 #text_change 24-Jul-1998
Search completed: December 21, 2000, 08:30:07 Job time: 271 sec
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R;Rocher, A.; Colilla, F.; Ortiz, M.L.; Mendez, E.
FEBS Lett. 310, 37-40, 1992
A;Title: Identification of the three major coeliac immunoreactive proteins and one alpha A;Reference number: S29207; MUID:92405739
A;Accession: S29209
                                                                                                                                                                                                                                                                                                                 C; Keywords: prolamin; seed
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A:Accession: S54272
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-18 <GEN>
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Best Local Similarity 50.0
Matches 5; Conservative
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Best Local Similarity 44.4%;
Matches 4; Conservative
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Best Local Similarity 33.3%;
Matches 4; Conservative
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Pred. No. 2.8e+03;
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Pred. No. 2.6e+03;
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cytotoxin-binding protein - rabbit
C:Species: Oryctolagus cuniculus (domestic rabbit)
C:Date: 18-Feb-1994 #sequence_revision 19-Apr-1996 #text_change 16-Feb-1997
C:Accession: 339049
R:Lutz, F.; Mohr, M.; Grimmig, M.; Leidolf, R.; Linder, D.
Eur. J. Biochem. 217, 1123-1128, 1993
A:Title: Pseudomonas aeruginosa cytotoxin-binding protein in rabbit erythro.
A:Reference number: 339049
A:Accession: S39049
A:Status: Preliminary
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S39049
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A; Residues: 1-13 <CAS>
A; Cross-references: EMBL: X60889
A; Experimental source: T lymphocyte
C; Keywords: T-cell receptor
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PH0786
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A;Reference number: PH0746; MUID:92078846
A;Accession: PH0786...
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C:Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C:Accession: PH0786
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A;Residues: 1-20 <LUT>
C;Superfamily: lens fiber membrane major intrinsic
                                                                                                                                                prostaglandin D-synthase - rat (fragment)
N;Alternate names: prostaglandin-H2 D-!somerase
C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Dec-1996 #sequence_revision 13-Mar-1997 #text_change 31-Oct-1997
C;Accession: S65717
R;Giacomelli, S.; Leone, M.G.; Grima, J.; Silvestrini, B.; Cheng, C.Y.
Biochim. Biophys. Acta 1310, 269-276, 1996
                                                                                                                                                                                                                                                                                                          RESULT
S65717
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                             A;Title: Astrocytes synthesize and secrete prostaglandin D synthetase in vitro. A;Reference number: S65716; MUID:96177373
A;Accession: S65717
A;Status: preliminary
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                    A; Molecule type: protein A; Residues: 1-15 <GIA>
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Pred. No.
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RESULT
PA0046
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Nucleic Acids Res. 19, 4000, 1991
A;Title: Nucleotide sequence of beta-lactamase regulatory genes
A; Reference number: S34444; MUID:91319567
A; Accession: S34444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S34444
blaz protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Reference number: PA0001
A; Accession: PA0046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Kamo, M.; Kawakami, T.; Miyatake, submitted to JIPID, July 1994
A;Description: Separation and chara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein QA100044 - Arabidopsis thaliana (fragment)
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Decies: Arabidopsis thaliana (mouse-ear cress)
C;Date: 30-Jun-1992 #sequence_revision 06-Jan-1995 #text_change 06-Jun-1997
C;Accession: PA0046; PA0042
C;Accession: PA0046; PA0042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
RESULT 13
554272
CTC 75 protein - human
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 27-oct-1995 *sequence_revision 03-Nov-1995 *text_change 17-Mar-1999
C;Accession: S54272
R;Genersch, E; Eckerskorn, C; Lottspeich, F; Herzog, C; Kuehn, K; Poese EMBO J. 14, 791-800, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Staphylococcus aureus
C;Date: 22-Nov-1993 #sequence_revision 09-Mar-1996 #text_change 07-May-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Experimental source: stem
                                                                                                                                                                                                                                                                                                                                           A; Genome:
                                                                                                                                                                                                                                                                                                                                                                                         A; Experimental source: strain RN11
A; Note: the nucleotide sequence was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Accession: S34444
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A; Residues: 1-16 <WAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Status: nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                            C; Genetics:
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Best Local S
Matches 5
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Best Local Similarity
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Best Local
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                                                                                                                                                                                                                                                                       Score 22;
Pred. No.
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Pred. No. 2.2e+03;
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Pred. No. 2.2e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                 submitted
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                       K.; Poeschl,
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ameletin - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change
C;Accession: A61411
R;Burzynskl. S.R.
Anal, Biochem. 70, 359-365, 1976
A;Title: Sequential analysis in subnanomolar amounts of peptices
A;Reference number: A61411; MUID:76182447
A;Accession: A61411
              R:Denamur, E.; Chehab, F.F.
Hum. Mol. Genet. 3, 1089-1094, 1994
A:Title: Analysis of the mouse and.
A:Reference number: I49593; MUID:95
A:Accession: I49593
                                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: protein
A;Residues: 1-6 <BUR>
C;Keywords: pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
A61411
                                                                                                 cystic fibrosis transmembrane conductance regulator -
C;Species: Mus musculus (house mouse)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #te
C;Accession: I49593
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Best Local Similarity
Thes 5; Conserva
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A;Cross-references: GDB:119297;
A;Map position: 11p15.4-11p15.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hemoglobin beta chain thalassemia mutant Portuguese - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 02-Jul-1996 #sequence_revision 11-Jul-1996 #text_change 20-Apr-2000
C:Accession: I52618
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C;Genetics:
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A; Status: preliminary;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Oner, R.; Oner, C.; Wilson, J.B.; Tamagnini, G.P.; Ribeiro, L.M.; Huisman, T.H. Br. J. Haematol. 79, 306-310, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Status: translated from GB/EMBL/DDBJ
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Best Local :
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| 3 VQAAYQK 9
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translated from GB/EMBL/DDBJ
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71.48;
                                                                                                                                                                                                                                                                                                                          26.0%;
83.3%;
                                use and rat CFTR
MUID:95072572
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Pred. No.
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Pred. No.
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                                                regions
                                                                                                                                                 mouse (fragment)
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A; Reference number: A49192; MUID:93238653 A; Accession: A49192
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R; Yamauchi, K.; Kası
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N;Alternate names: 3,5,3'-L-triiodothyronine-specific binding protein
C;Species: Rana catesbeiana (bullfrog)
C;Date: 19-Dec-1993 *sequence_revision 18-Nov-1994 *text_change 28-Ap
                                                                                                                                                                                                                                                                                                                                                                               RESULT
A49192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A:Gene: CFTR C:Superfamily: cystic fibrosis transmembrane
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A;Title: Analysis of the mouse and rat CFTR promoter A;Reference number: I49593; MUID:95072572
A;Accession: I84733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene CFTR protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 20-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-17 <RES>
A; Cross-references: GB:L04873; NID:g414726; PIDN:AAA73562.1; PID:g553892
C; Genetics:
A; Gene: CFTR
C; Superfamily: cystic fibrosis transmembrane conductance regulator; ATP-binding casse
                                                                                                                   A; Note: sequence extracted
                                                                                                                                                   A; Molecule type: protein A; Residues: 1-19 < YAM>
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Best Local Similarity
"hes 7; Conserva
                                                                                                                                 A, Experimental source: tadpole plasma
                                                                                                                                                                                    A; Status: preliminary
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A; Residues: 1-17 < RES>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: GB:L26098; NID:g425185; PIDN:AAA73561.1; PID:g915270
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                              Query Match
Best Local S
Matches 5
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Best Local S
Matches 7
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SKKKLFLSLLD 18
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                                Similarity
5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 7; Conser
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32, 2254-2261, 1993
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                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                24.0%;
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                              Pred. No. 1.9e
2; Mismatches
                                                                                                                 NCBI backbone (NCBIP:130235)
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Pred. No.
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Pred.
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No.
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1.2e+03;
7;
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1.2e+03;
                              DB 2; Le
1.9e+03;
hes 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     conductance regulator;
                                                             Length 19;
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SKXPLMVKVLD 17

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Title:
Perfect score:
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Maximum Match 100%
Listing first 45 s
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                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Run on:
                                                                                                                                                                                                                       Result
No.
                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq length: 0 Maximum DB seq length: 20
                                                                                                                                                                                                                                                                                                                     Database
pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                       Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein search, using sw model
PIR_65:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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Match
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96
1 TTVQASYSKKKLFLSLLDFQ 20
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                                                                                                                                                                                                                                                                                                                                                                                                    182106 segs, 63460219 residues
GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd
                                                                                                                                                                                                                         Length
DB
A49192
S39046
PH0786
S65717
PA0444
S54272
G22565
S29209
A44920
PN08685
B45865
B45865
S32587
A35557
S32587
H49034
S03955
S01669
S02473
S42373
S42313
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S13864
I52618
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                                                                                                                                                                                                                                              SUMMARIES
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11.273 Million cell updates/sec
                                                                                                cytotoxin-binding
T-cell receptor al
prostaglandin D-sy
protein QA100044
blaz protein - Sta
CTC 75 protein - h
R-phycorythrin ga
avenin alpha-2 - o
2-halobenzoate 1,2
 endosperm protein,
translation elonga
glutathione transf
glutathione S-tran
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adrenocortical cel
hypothetical prote
nuclear antigen EB
acidic fibroblast
rRNA N-glycosidase
coat protein VP1
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cystic fibrosis tr
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transthyretin - b
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                                                                                  dystrophin-associa
T-cell surface gly
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QΥ

9 KKKLFLSLL 17

Query Match
Best Local Similarity
Matches 6; Conserv

Conservative

29.2%;

Score 28; DB 2; Le Pred. No. 2.1e+02; Pred. No. 2.1e+02;

Length 14; Indels

0; Gaps

0;

RESULT 2 \$13864 methyl coenzyme M reductase (EC 1.8) II alpha ch C; Species: Methanobacterium thermoautotrophicum A; Variety: strain Marburg C; Date: 19-Mar-1997 #sequence_revision 13-Sep-1998 # C; Accession: \$13864 C; Accession: \$13864 R; Rospert, S; Linder, D.; Ellermann, J.; Thauer, R. Eur. J. Blochem. 194, 871-877, 1990 A; Title: Two genetically distinct methyl-coenzyme M A; Reference number: \$13864; MUID:9109370 A; Accession: \$13864 A; Molecule type: protein A; Residues: 1-14 <ros> A; Residues: 1-14 <ros> A; Residues: 1-14 <ros> C; Keywords: methanogenesis; oxidoreductase</ros></ros></ros>	Query Match 31.2%; Score 30; DB 2; Best Local Similarity 60.0%; Pred. No. 1.2e+02; Matches 6; Conservative 2; Mismatches 2 Oy 8 SKKKLFLSLL 17 Db 2 AKKKAFIPLL 11	RESULT 1 \$14560 S14560 C;Dateles: chloroplast pisum sativum (garden pea) C;Accession: \$14560 R;Smith, A.G.; Wilson, R.J.; Kaethner, T.M.; Willey, D R;Smith, A.G.; Wilson, R.J.; Kaethner, T.M.; Willey, D R;Smith, A.G.; Wilson, R.J.; Kaethner, T.M.; Willey, D Submitted to the EMBL Data Library, October 1990 A;Reference number: \$14567 A;Recession: \$14560 A;Recession: \$14557 A;Accession: \$14557 A;Accession: \$1-18 < SMI> A;Residues: 1-18 < SMI> A;Residues: 1-18 < SMI> A;Cennetics: A;Genome: chloroplast C;Superfamily: maize chloroplast protein cemA C;Superfamily: maize chloroplast transmembrane protein	ALIGNMENTS	30 20 20.8 20 2 PL0192 31 20 20.8 20 2 A44921 32 20 20.8 20 2 A46479 32 19 19.8 9 3 PC7076 34 19 19.8 10 2 A13687 35 19 19.8 13 2 S47365 36 19 19.8 13 2 S47365 37 19 19.8 14 2 S14336 39 19 19.8 15 2 S48990 40 19 19.8 17 2 S61451 41 19 19.8 17 2 PS1331 42 19 19.8 18 2 S48863 43 19 19.8 18 2 S48863 44 19 19.8 19 2 S48863 45 19 19.8 19 2 S48863
<pre>chain - Methanobacterium thermoauto #text_change 30-Oct-1998 R.K. M reductases in Methanobacterium th</pre>	Length 18; ;; Indels 0; Gaps 0;	st (fragment) text_change 11-Jan-2000 D.L.; Gray, J.C.		Ig lambda 2 chain hydroxypyruvate re retinoid-X-recepto spectrin alpha cha caerulein-like pep T-cell receptor be T-cell antigen rec mastoparan B - hor leukotriene B-4 12 ribosomal protein hypothetical prote Ig heavy chain DJ neurofibromatosis-cyclin C - mouse (serpin wszCI - whe flagellar sheath p

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; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-305-871A-9
Search completed: December 21, 2000, 08:31:49 Job time: 372 sec
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                                                                                                                                                    Query Match 27.1%; Score 26; DB 1; Length 16; Best Local Similarity 55.6%; Pred. No. 2.3e+02; Matches 5; Conservative 2; Mismatches 2; Indels
                                                                                    3 VQASYSKKK 11
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8 LKAIYEKKK 16
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Best Local Similarity
Watches 5; Conserv
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                                                                                                                                                                                                                                                                            Sequence 2, Application PC/TUS9501671 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 202-408-400
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                       APPLICANT: University of Rochester
TITLE OF INVENTION: Inducing Tolerance With Tolerogenic
TITLE OF INVENTION: Fusion Proteins
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Meyers, Kenneth J.
REGISTION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 033
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
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TITLE OF INVENTION:
TITLE OF INVENTION:
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ATTORNEY/AGENT INFORMATION:
NAME: Meyers, Kenneth J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/801,818
FILING DATE: 05-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: 11
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APPLICATION NUMBER: U
FILING DATE: 15-NOV-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                           COUNTRY: U
ZIP: 55402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 07-JUL
                                                                                                                             STATE:
                                                                                                                                        CITY: Minneapolis
                                                                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: D.C.
ZIP: 20005-3315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                    7 LKAIYEKKK 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amino acid
GY: linear
                                                                                                                        Minnesota
                                                                                                                                                          E: Schwegman, L
3500 IDS Center
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1300 I Street, N.W., Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15 amino acids
                                                                                                        United States of America
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptide
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07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27.18; 55.68;
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                                                                                                                                                                         Lundberg & Woessner
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Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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Best Local :
                                                                                                                                    CLASSIFICATION: 424
PRIOR APPLICATION NUMBER: US 08/
APPLICATION NUMBER: US 08/
FILING DATE: 14-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: Bastian, Kevin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                   TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 612-339-3061 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/305,87
FILING DATE: 14-SEP-1994
                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                    SEQUENCE CHARACTERISTICS
                                                                                    REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Sidney, John
APPLICANT: Alexander, Jeffrey L.
TITLE OF INVENTION: Alteration of Immune Response Using Pan
TITLE OF INVENTION: DR-Binding Peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
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CITY: San Francisco
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                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
ZIP: 94111-3834
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nes 5; Conservative
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                                                                                                                         REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
ENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                               California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E: Townsend and Townsend and Crew LLP Two Embarcadero Center, Eighth Floor
   16 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sette, Alessandro
Gaeta, Federico
Grey, Howard M.
                                                                                                                                                                                                                                                                                                    PatentIn Release #1.0, Version #1.30
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                                                                       576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27.1%;
55.6%;
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Pred. No. 2.2e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 15;
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                                                                                   TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-195-874-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-195-874-2
Sequence 2, Application US/08195874; Patent NO. 5817308
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TOPOLOGY: unknown ; MOLECULE TYPE: peptide PCT-US95-06077-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 5; Conserv
                 Query Match
Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                     TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Tole
TITLE OF INVENTION: Immu
TITLE OF INVENTION: Tole
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                    NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 85/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
TELEFAX: 612-339-3061
                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release CURRENT APPLICATION DATA: US/01 APPLICATION NUMBER: US/01 FILING DATE: 02-FEB-1994
                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Mueting, Ann M.
                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: 215-540-9200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Bak, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Scott, David W. APPLICANT: Zambidis, Elias
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: Z15 -540-5818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 3500 IDS CITY: Minneapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 31
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U
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WENTION: Tolerogenic Fusion Proteins of
NVENTION: Immunoglobulins and Methods for Inducing and Maintaining
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 Conservative
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83.3%;
                 27.1%;
55.6%;
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Pred. No. 2e+02;
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Score 26; DB 2; Le
Pred. No. 2.2e+02;
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US-08-484-905-26; Sequence 26; A
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US-08-481-985B-26
                 RESULT
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Best Local Similarity
Matches 5; Conser
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                                                                                                                                                                                                                                                                                                                          TELEFAX: 202-408-4400 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
FILING DATE: 15-NOV-1991
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: POTTER Jane E. R.
REGISTRATION NUMBER: 33,33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Mottez, Estelle
APPLICANT: Abastado, Jean-Pierre
APPLICANT: Kourilsky, Philippe
TITLE OF INVENTION: An Altered Major Histocompatibility
TITLE OF INVENTION: Complex(MHC) Determinant and Methods
TITLE OF INVENTION: Determinant
NUMBER OF SEQUENCES: 127
                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 03
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
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MEDIUM TYPE: Floppy Disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 07/801,818 FILING DATE: 05-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/484,905 FILING DATE: 07-JUNE-1995 CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.25
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SYSTEM: PC-DOS-/MS-DOS
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Pred. No.
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2.2e+02;
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Abastado, Mottez, Estelle

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Application US/08481985B

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Matches

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US-08-454-207A-44
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                                                                                                                                   Sequence 44, Application US/08454207A Patent No. 5710123
                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
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                                                                                                                 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION UMBER: PCT/US93/12110
APPLICATION NUMBER: PCT/US93/12110
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/997,771
FILING DATE: 18-DEC-1992
                       APPLICANT: Heavner, George A.
APPLICANT: Kruszynski, Marian
TITLE OF INVENTION: PEPTIDE INHIBITORS OF SELECTIN BINDING
NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 1.44 Mb
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 6.1
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NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5710123ris LLP
STREET: One Liberty Place - 46th Floor
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 215 July 10: TELEPHONE: 215-568-3439
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REFERENCE/DOCKET NUMBER: CC
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       ADDRESSEE:
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 Woodcock Washburn Kurtz Mackiewicz & No. 57.10123ris LLP
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Pred. No. 1.2e+05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/U:
FILING DATE: 13-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/99:
FILING DATE: 18-DEC-1992
                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Immunobiology Research, Institute Inc.
TITLE OF INVENTION: Vaccine Interdiction of Extracellular
TITLE OF INVENTION: Transactivating Proteins of Human Immunodeficiency
TITLE OF INVENTION: and Other Chronically Infecting Viruses Employing S
TITLE OF INVENTION: Intercellular Transactivating Strategies
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/247,991
FILING DATE: 23-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
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NAME: Dianne B. Elderkin
REGISTRATION NUMBER: 28,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 1.44 Mb
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
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OPERATING SYSTEM:
                                                                       FILING DATE:
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                                                                                                                                                                                                                                                        CITY: Spring House
STATE: Pennsylvania
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                                                                                          APPLICATION NUMBER:
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SYSTEM: PC-DOS/MS-DOS
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09-JUN-1995
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; Pred. No. 1.2e
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COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

COUNTRY: ZIP: 920

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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 45, Application US/08454207A Patent No. 5710123 GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 5:
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REFERENCE/DOCKET NUMBER: SCI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-554-2937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/252,753
FILING DATE: 03-OCT-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/415,029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
         FILING DATE: 09-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION UNMBER: PCT/US93/12110
FILING DATE: 13-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Heavner, George A.
APPLICANT: Kruszynski, Marian
TITLE OF INVENTION: PEPTIDE INHIBITORS OF SELECTIN BINDING
NUMBER OF SEQUENCES: 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYPOTHETICAL:
                                                                                                                                                 SOFTWARE: WordPerfect 6.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 38.5%; hes 5; Conservation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
COPERATING SYSTEM: PC-DOS/MS-DOS
COPTIMARD: Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Bingham, Douglas A REGISTRATION NUMBER: 32,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US
FILING DATE: 19910213
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                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5710123ris LLP STREET: One Liberty Place - 46th Floor
                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                           APPLICATION NUMBER: US/08/454, 207A
 APPLICATION NUMBER:
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AMINO ACID
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07/997,771
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Pred. No. 1.3e+02;
3; Mismatches 5;
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                                                               TOPOLOGY:
US-08-454-207A-30
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Query Match
Best Local Similarity
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US
FILING DATE: 13-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION UMBER: 07/997
FILING DATE: 18-DEC-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                         TELEFAX: 215-568-3439
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 1.44 Mb
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Heavner, George A. APPLICANT: Kruszynski, Marian
                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 215-568-3100
                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
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SOFTWARE: WordPer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                        NAME: Dianne B. Elderkin REGISTRATION NUMBER: 28, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
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                                                                                            amino acid
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 27.1%;
66.7%;
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Pred. No. 1.2e+05;
   Score 26;
Pred. No.
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                  Length
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RESULT 2
5266328-11
;Patent NO. 5266328
;Patent NO. 5266328
;Patent NO. 5266328
;TITLE OF INVENTION: LAMININ CHAIN POLYPEPTIDES FROM THE CARBOXY TERMINAL GLOBULAR DOMAIN
;MUMBER OF SEQUENCES: 14
;CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/573,672
                                                                                      US-09-100-414B-26
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Query Match 30.2%; Score 29; Best Local Similarity 100.0%; Pred. No. Matches 6; Conservative 0; Mismatch
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Patent No.
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Best Local :
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APPLICANT: Wang, Chang Yi
TITLE OF INVENTION: NOVEL LHRH PEPTIDE
TITLE OF INVENTION: IMMUNOGENS
NUMBER OF SEQUENCES: 106
CORRESPONDENCE ADDRESS:
ADDRESSEE: MOTGAN & Finnegan, L.L.P.
STREET: 345 Park Avenue
                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-758-4800
TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO: 26:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
                                                                                                TYPE: amino a
TOPOLOGY: lit
MOLECULE TYPE:
                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/100,414B
FILING DATE: 20-JUNE-1998
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: MAT15 H. LLD
REGISTRATION NUMBER: 29,323
REFERENCE/DOCKET NUMBER: 1151-4157
                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 10154-0054
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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STATE: NY
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5. 6025468
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GY: linear
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50.0%;
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Pred. No. 25;
 Mismatches
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                 DB 3;
0;
                                 Length 18;
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; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-100-414B-30
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US-07-654-839-5
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Patent INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wang, Chang Yi
TITLE OF INVENTION: INVEL LHRH PEPTIDE
TITLE OF INVENTION: IMMUNOGENS
NUMBER OF SEQUENCE:
NUMBER OF SEQUENCE:
                                                                                                                                                                                                                                                     Sequence 5, Application US/07654839 Patent No. 5372933 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/100
FILING DATE: 20-JUNE-1998
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: MATIA H. Lin
REGISTRATION NUMBER: 29,323
REFERENCE/DOCKET NUMBER: 1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 212-758-480
TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO:
                                                                                                        APPLICANT: Zamarron, Concepcion
APPLICANT: Diow, Edward F
APPLICANT: Ginsberg, Mark H
APPLICANT: Ginsberg, Mark H
TITLE OF INVENTION: MONOCLONAL ANTIBODIES AGAINST
TITLE OF INVENTION: RECEPTOR-INDUCED BINDING SITES
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC Windows
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LENGTH: 18 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Morgan & Finnegan, L.L.P.
STREET: 345 Park Avenue
CITY: New York
                                  ADDRESSEE: The Scripps Research Institute, Office of ADDRESSEE: Patent Counsel STREET: 10666 No. 5372933th Torrey Pines Road., Suite 220, STREET: Mail Drop TPC8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 10154-0054
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1 KKKLFL 6
                      CITY:
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Title:
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Maximum Match 100%
Listing first 45 s
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq
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 y length: 0
y length: 20
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1: /cgn2_6/ptodata/2,

2: /cgn2_6/ptodata/2,

3: /cgn2_6/ptodata/2,

4: /cgn2_6/ptodata/2,

5: /cgn2_6/ptodata/2,
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Match
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 TTVQASYSKKKLFLSLLDFQ
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/cgn2_6/ptodata/2/1aa/6_COMB.pep:*
/cgn2_6/ptodata/2/1aa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/2/1aa/backfiles1.pep:*
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  DΒ
US-09-100-414B-26
US-09-100-414B-30
US-09-100-414B-30
US-09-100-4414B-30
US-08-454-207A-45
US-08-454-207A-40
US-08-454-207A-41
US-08-454-207A-41
US-08-195-8742-20
US-08-195-8742-20
US-08-195-10671-2
US-08-195-10671-2
US-08-264-207A-31
US-08-454-207A-33
US-08-454-207A-33
US-08-454-207A-33
US-08-454-207A-38
US-08-454-207A-39
US-08-454-207A-39
US-08-454-207A-39
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5266328-11
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Compugen Ltd.
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3.355 Million cell updates/sec
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                                   Sequence 26, Appl
Sequence 5, Appl
Sequence 45, Appl
Sequence 45, Appl
Sequence 41, Appl
Sequence 41, Appl
Sequence 26, Appl
Sequence 26, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 29, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 33, Appl
Sequence 33, Appl
Sequence 33, Appl
Sequence 34, Appl
Sequence 35, Appl
Sequence 36, Appl
Sequence 37, Appl
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                                                                                                                                                                                                                                                                                                                                                     Description
     Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                             Sequence 43,
                                                                                                                                                                                                                                                                                                                   43, Appl
5266328
                      Query Match
Best Local Similarity
7; Conserv
                                                                                          TOPOLOGY:
US-08-454-207A-43
        δÃ
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                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: F
FILING DATE: 13-DEC-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: One Libert;
CITY: Philadelphia
STATE: PA
                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
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                                                                                                                  amino acid
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                                 Conservative
                                                                                                        linear
                                              100.0%;
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Result No.

14 15 16 17 18 19 20 21 22 23 23 24 25 26

\$; Score 33; DB
\$; Pred. No. 1.2
0; Mismatches

DB 1; 1.2e+05; 0;

0; Gaps

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05-00-004-074-40	115-00-561-073-30	TIE-09-100-414R-24	US-08-499-523-45	US-08-243-879A-24	US-08-182-483A-25	US-08-233-203-10	US-U7-989-764-4	05-07-992-288-4	05-09-303-4	20 00 100 771 7	115-09-133-774-9	PCT-US94-01234-47	PCT-US95-04589-11/	US-08-310-912A-117	CS-C6-EU9 UUSA //	TTC-00-150-330A-77	US-08-456-112B-42	US-08-454-207A-5	US-U8-454-20/A-2	200 11 201 20
	20,	Sequence 24, Appl	Sequence 45, Appl	-		л (1 4	sequence A Appli	Δ.	9	Sequence 9, Appli		1 1		117		Sequence 42, Appr	- 3	Sequence as septem	J

ALIGNMENTS

RESULT 1 US-08-454-207A-43 Sequence 43, Application US/08454207A ; Patent No. 5710123 TELEPHONE: 215-568-310 TELEFAX: 215-568-3439 TINFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 9 amino acids APPLICANT: Heavner, George A. APPLICANT: Kruszynski, Marian TITLE OF INVENTION: PEPTIDE INHIBITORS OF SELECTIN BINDING NUMBER OF SEQUENCES: 70 COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inch disk, COMPUTER: IBM PC compatible FILING DATE: 13-DEC-1993 PRIOR APPLICATION DATA: APPLICATION NUMBER: 07/997,771 FILING DATE: 18-DEC-1992 ATTORNEY/AGENT INFORMATION: CURRENT APPLICATION DATA: APPLICATION NUMBER: US FILING DATE: 09-JUN-19 REFERENCE/DOCKET NUMBER: COTELECOMMUNICATION INFORMATION: TELEPHONE: 215-568-3100 NAME: Dianne B. Elderkin REGISTRATION NUMBER: 28, E: Woodcock Washburn Kurtz Mackiewicz & No. 5710123ris LLP One Liberty Place - 46th Floor WordPerfect 6.1 UMBER: US/08/454,207A 09-JUN-1995 inch disk, 1.44 PC-DOS/MS-DOS PCT/US93/12110 28,598 43: CCOR-0183 ₹

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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Emmermann, Michael
APPLICANT: Emmermann, Michael
APPLICANT: Emmermann, Michael
APPLICANT: Virgin, Ivar
APPLICANT: Renz, Andreas
TITLE OF INVENTION: DNA MOLECULES CODING FOR DEBRANCHING ENZYMES DERIVED
TITLE OF INVENTION: ENAM MOLECULES CODING FOR DEBRANCHING ENZYMES DERIVED
CURRENT APPLICATION NUMBER: US/08/860,339
CURRENT FILING DATE: 1997-11-25
EARLIER APPLICATION NUMBER: DE P4447387.7
EARLIER APPLICATION NUMBER: DE P4447387.7
INVINER OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 15
TYPE: PRT
ORGANISM: Solanum tuberosum
US-08-860-339-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: Solanum tuberosum
US-08-596-257A-10
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US-08-860-339-10
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REGISTRATION NUMBER: 24.735

REFERENCE/DOCKET NUMBER: P/951-118

TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 382-0700

TELEFAX: (212) 382-0888

TELEFX: 236925
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOTICAY: 1inear
Search completed: December 21, 2000, 08:36:43 Job time: 387 sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 10, Application US/08860339 Patent No. 6117665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 24.3%;
Best Local Similarity 30.8%;
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/596,257A
FILING DATE: 08-FEB-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE 4327165.0
FILING DATE: 09-AUG-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                       Query Match 24.3%;
Best Local Similarity 30.8%;
Matches 4; Conservative
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1 LEQTNYGLPQQVI 13
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LEQTNYGLPQQVI 13
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Pred. No.
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; TOPOLOGY: 11;; MOLECULE TYPE: US-08-940-096-134
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US-08-765-783A-83
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                                                                                             Patent No. 5994524 GENERAL INFORMATION:
                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 50.0
Matches 6; Conservative
                                                                                                                            Sequence 83,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08, FILING DATE: 29-SEP-1997 CLASSIFICATION: 530 PRIOR APPLICATION DATA: APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Buttner, Klaus
APPLICANT: Cornut, Isabelle
APPLICANT: Metz, Gunther
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
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CITY: N
STATE:
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                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Coruzzi, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 00
                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
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                                                                                                                           Application US/08765783A
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1155 Avenue of the Americas
                               Sato,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             650-493-5556
Tsuchiya, Masayuki
Yamazaki, Tatsumi
                                            Matsushima, Kouji
Matsumoto, Yoshihiro
Yamada, Yoshiki
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                                                                                                                                                                                                                                                                                                                                                                                 linear
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Pred. No. 1
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                                                                                                                                                                                                                                                                                               Length 22;
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US-08-596-257A-10
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                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: KOSSMAN
APPLICANT: EMMERMA
APPLICANT: VIRGIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                           Patent No.
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 10,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
ATTORNEY/AGENT INFORMATION:
ANAME: MUTAShige, Kate H
REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 350:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 07-MAR-1
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Ostrolenk
                                                                                                                                                                                                                                            APPLICANT: VIRGIN, IVAT
TITLE OF INVENTION: DEBRANCHING ENZYMES AND DNA SEQUENCES
TITLE OF INVENTION: CODING THEM, SUITABLE FOR CHANGING THE DEGREE OF BRANCHING
TITLE OF INVENTION: OF AMYLOPECTIN STARCH IN PLANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: RETITLE OF INVENTION: In.
MUMBER OF SEQUENCES: 1.
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 2000 Peni
CITY: Washington
                                                                                                                        COUNTRY:
                                                                                                                                              STATE: NY
                                                                                                                                                             STREET: 1180 Av
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/0 FILING DATE: 07-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 202-822-0168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 20006-1888
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 QHHFGFP 7
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                                                                                                            10036-8403
                                                                                                                                                                                                                                                                                                                                                                           0, Application US/08596257A 6001628
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                                                                                                                                                                              E: Ostrolenk, Faber, Gerb & Soffen
1180 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                         EMMERMANN, Michael
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                                                                                                                                                                                                                                                                                                                                        KOSSMAN, Jens
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Pred. No. 1.2e+05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 9;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No. 6004925
CENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 134, Application US/08940095 Patent No. 6004925
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Best Local
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               TELEFAX: 650-493-5556
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELLEPAX: (415) 576-0300
                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
                                                                                              FILING DATE:
ATTORNEY/AGENIZI, LAURA A
NAME: COTUZZI, LAURA A
REGISTRATION NUMBER: 30,7
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                              APPLICATION NUMBER: US/08/940,095
FILING DATE: 29-SEP-1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                               OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Pennie & Edmonds LLP STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
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Cornut, Isabelle
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66.7%;
                                                                                                              30,742
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; TOPOLOGY: lin
; MOLECULE TYPE;
US-08-940-095-134
                             Query Match
Best Local Similarity
"hes 6; Conserv?
                                                                                                               ; MOLECULE TYPE: US-08-940-093-134
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Best Local Similarity 50.0
Matches 6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 134, Application US/08940093
                                                                                                                                                                                                              TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 00 TELECOMMUNICATION INFORMATION: TELEPHONE: 650-493-4935
                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 29-SEP-1
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
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TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Cornut, Isabel APPLICANT: Metz, Gunther
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
11 EHLLVDFLQSLS 22
                                                                                                                                        TYPE: amino acid
STRANDEDNESS: sin
TOPOLOGY: linear
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                                                                                                                                                                                                                                       TELEPHONE: 650-493-49
TELEFAX: 650-493-5556
                                                                                                                                                                                                                                                                                                NAME: Coruzzi, Laura REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
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1155 Avenue of the Amer
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Cornut, Isabelle
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                                          Conservative
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                                                                                                                            No. 6037323e
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                                                      25.2%;
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                                                      Score 28; I
Pred. No. 1
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Pred. No. 1.5e+02;
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                                          Mismatches
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                                                       .5e+02;
                                          3; Indels
                                                                   Length 22;
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                                       Gaps
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; MOLECULE TYPE:
US-08-827-618A-22
                                                                                                                                                                                                                                                                                                                                    Sequence 22, Application US/08483952A Patent No. 6011139 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07,
FILING DATE: 18-JUN-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 415-398-3249
          COMPUTER READABLE FORM:
MEDIIM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                               APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert
STREET: Four Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING PARTION: 435
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/485,725
APPLICATION NUMBER: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-60780-12/RFT/MTK
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS
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ATTORNEY/AGENT INFORMATION:
                                                                                                               ZIP:
                                                                                                                                                 CITY: San Francisco
STATE: CA
                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
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CITY: San Francisco
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ZIP: 94111-4187
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                                                                                                               94111-4187
APPLICATION DATA:
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linear
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RESULT 9
US-08-159-339A-401
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Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 07/716,909
FILING DATE: 18-JUN-1991
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/586,536
FILING DATE: 21-SEP-1990
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
REFERENCE/DOCKET NUMBER: 31,801
REFERENCE/DOCKET MAMBER: A-60780-7/F
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION: APPLICANT: Kubo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 415-781-191
TELEFAX: 415-398-3249
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: sinc
TOPOLOGY: linear
MOLECULE TYPE: pept:
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
                                                                                            SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/159,339A FILING DATE: 29-NOV-1993
                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 1254
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: HLA PRINTED OF INVENTION: Uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
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                                                                                                                                                                          COMPUTER: IBM Compatible OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                         STREET: Two Embarcac
CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 17 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/01 FILING DATE: 07-JUN-1995 CLASSIFICATION: 536
                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 94111-3834
                                                                                                                                                                                                                                                                                           STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60371
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Sette, Alessandro
Celis, Esteban
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 amino acids
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50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                     HLA Binding peptides and Their
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Pred. No.
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SOFTWARE: MICROSOFT WORD 5.0a CURRENT APPLICATION DATA:
APPLICATION NILMARINE

COMPUTER: Apple Macintosh
OPERATING SYSTEM: System

APPLICATION NUMBER: FILING DATE: Februa

February 18, 1994

US/08/199,508

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US-08-399-696-85
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Best Local :
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ETLING DATE: February 23, 1993
ATTORNEY, AGENT INFORMATION:
NAME: NO. 5717058ak, Henry P.
REGISTRATION NUMBER: 33200
REFERENCE/DOCKET NUMBER: 121 CIP
TELECOMMUNICATION INFORMATION:
                                                                                                                             CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/156,671
FILING DATE: 22-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 15522-0007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
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                                                                                                TELEFAX: (415) 326-2422 INFORMATION FOR SEQ ID NO: 8
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MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: PATENTIA Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: p5:
TITLE OF INVENTION: P0:
NUMBER OF SEQUENCES: 1:
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HYPOTHETICAL: yes
MOLECULE TYPE:
                                                                               SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 02-MA
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                 TOPOLOGY:
                               STRANDEDNESS:
                                                TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 FGYPVYVFGDCVQ 13
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5, 5756669
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                                            : 19 amino acids amino acid
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                                unknown
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38.5%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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63;
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Best Local Similarity
Watches 5; Conserve
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; MOLECULE TYPE:
US-08-484-530-22
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Best Local S
Matches 5
                                                                                                          Sequence 22, Application US/08827618A Patent No. 5998366
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-60780-8/RFT/MTK
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
TELEFAX: 415-98-3249
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                            GENERAL INFORMATION:
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APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L.
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
NUMBER OF SEQUENCES: 60
   APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L.
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Rel-
CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert STREET: Four Embarcadero Center, Suite 3400 CITY: San Francisoc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12 EHLIIDGL 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 07-JUN
                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 20 amino acids TYPE: amino acid STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                 5 MDFGFPEHLL 14
                                                                                                                                                                                                                  9 IDFHYPNELL 18
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5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                      linear
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62.5%;
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50.0%;
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                                                                                                                                                                                                                                                                                    2;
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                                                                                                                                                                                                                                                                                                    Score 29; DF Pred. No. 93;
                                                                                                                                                                                                                                                                                    Mismatches
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US-08-940-096-133

; Sequence 133, Application US/08940096

; Patent No. 6046166
                                                                             RESULT
                                                                                                                                                                            Query Match
Best Local Similarity
Tatches 7; Conserve
                                                                                                                                                                                                                                                                                US-08-940-093-133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
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Best Local Similarity 58.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IDM COmpatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEO Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/940,0:
FILING DATE: 29-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
APPLICATION NUMBER:
            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 00:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEFAX: 650-493-556
TELEFAX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 133:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                           LENGTH: 22 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: No. 6037323e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A
REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 1155 A. CITY: New York
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                                                                                                                                                          11 EHLLVDFLQSLS 22
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                                                                                                                           FRLLEDLLQALN 18
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5. 6037323
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10036-2811
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Cornut, Isabelle
Metz, Gunther
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dasseux, Jean-Louis
Sekul, Renate
                                                                                                                                                                                              Conservative
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58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APOLIPOPROTEIN A-I AGONISTS
AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
                                                                                                                                                                                                            28.8%;
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Pred. No.
                                                                                                                                                                                                            Score 32;
Pred. No.
                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                            DB 3;
33;
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33;
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                                                                                                                                                                                                                           Length 22;
                                                                                                                                                                                          Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: amino acid
; STRANDEDNESS: sing
; TOPOLOGY: linear
; MOLECULE TYPE: NO. 6
US-08-940-096-133
                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Thes 7; Conserv
                                                                                                                                                                                                                                                                                       US-08-199-508-2
                                                                                                                                                                                                                                                                                                            RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:

NAME: COTUZZI, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 0091:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
TELEFAX: 650-493-5556
INFORMATION FOR SEQ ID NO: 133:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                         Sequence 2, Application US/08199508 Patent No. 5717058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: DOS
SOFTWARE: FRASLSEQ VERSION 2.0
SOFTWARE: FRASLSEQ VERSION 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/940,096
FILLING DATE: 29-SEP-1997
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                   APPLICANT: Matthews, Maura-Ann H.
APPLICANT: Stetler, Gary L.
APPLICANT: Anthony-Cahill, Spencer J.
APPLICANT: Anderson, David C.
APPLICANT: Moderson, David C.
TITLE OF INVENTION: Modulators of Gene Expression
COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb storage
                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Somatogen, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 10036-2811
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
                                                                                                                                         NUMBER OF SEQUENCES:
                                    CITY: Boulder
STATE: Colorad
ZIP: 80301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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                                                                                         STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Pennie & Edmonds LLP STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                            7 ERLLEDLLQALN 18
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                                                                                      5797 Central Avenue
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                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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Cornut, Isabelle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dasseux, Jean-Louis
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58.3%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 3;
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Run õ

protein on:

Title:

Scoring table: Sequence: Perfect score:

BLOSUM62 Gapop 10.0 ,

Sequence Sequence Sequence Sequence Sequence Sequence Sequence

Sequence Sequence Sequence Sequence Sequence

52, Appl 1, Appl 20, Appl 36, Appl 36, Appl 5, Appl 5, Appl 76, Appl 76, Appl 29, Appl 29, Appl 29, Appl 21, Appl 21, Appl

Sequence Sequence Sequence Sequence

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein search, using sw model
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1: /cgn2_6/ptodata/2
2: /cgn2_6/ptodata/2
3: /cgn2_6/ptodata/2
4: /cgn2_6/ptodata/2
5: /cgn2_6/ptodata/2
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111
1 LLLQMDFGFPEHLLV
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Copyright (c) 1993 - 2000 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LLLQMDFGFPEHLLVDFLQSLS
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/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/COMB.pep:*
/cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/2/iaa/backfiles1.pep:*
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US-08-940-095-133
US-08-940-093-133
US-08-940-096-13
US-08-199-508-2
US-08-199-508-2
US-08-184-530-22
US-08-827-618A-22
US-08-827-618A-22
US-08-18-339A-401
US-08-940-095-134
US-08-765-783A-83
US-08-765-783A-83
US-08-59-257A-10
US-07-678-974D-8
US-07-678-974D-8
US-08-162-149-10
US-08-162-149-10
US-08-162-149-10
US-08-162-149-10
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US-08-162-149-10
US-08-162-149-10
US-08-397-188-13
US-08-397-188-13
US-08-397-188-13
US-08-745-892-13
US-08-745-892-13
US-08-745-892-13
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(without alignments)
14.254 Million cell updates/sec
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    133, App
133, App
133, App
2, Appli
22, Appli
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22, Appl
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22, Appl
22, Appl
22, Appl
23, Appl
24, App
25, Appl
26, Appl
27, Appl
28, Appl
29, Appl
20, Appl
20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-940-095-133
                                                  , MOLECULE TYPE: US-08-940-095-133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 133, Applicate patent No. 6004925 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Buttner, Klaus
APPLICANT: Cornut, Isabelle
APPLICANT: Metz, Gunther
APPLICANT: Metz, Gunther
APPLICANT: Dufourcq, Jean
TITLE OF INVENTION: APOLIFOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ Version 2.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/940
                                                                                                                                                                                                                           TELEPHONE: 650-493-4935
TELEPHONE: 650-493-5556
TELEPHONE: 650-493-5556
                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 00
                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 29-SEP-1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
CITY: Ne
STATE: N
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM CON OPERATING SYSTEM:
                                                                                       STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                  LENGTH:
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6004925
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                                                                                                                           : 22 amino acids
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                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IBM Compatible
SYSTEM: DOS
                                                                                                            single
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PCT-US95-06613-52
US-08-620-213-1
US-08-620-213-1
US-08-238-163-20
US-07-977-696C-36
US-08-139-9308-36
US-08-039-778B-5
US-08-487-006-76
US-08-488-659A-76
US-08-488-659A-76
US-08-318-29
US-08-318-157B-25
US-08-318-157B-25
US-08-1818-17
US-07-918-181A-17
US-07-918-181A-21
US-08-080-073-21
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Result

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Score

Query Match

Length

332 332

Minimum Maximum

DB DB

seq

length: length:

22

number

of.

Database

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seed storage protein 12S 2 - Arabidopsis thaliana (fragment)
C:Species: Arabidopsis thaliana (mouse-ear cress)
C:Date: 30-Jun-1992 #sequence_revision 06-Jan-1995 #text_change 11-Jul-1997
C:Accession: PA0015
R:Kamo, M.: Kawakami, T.: Miyatake, N.: Tsugita, A.
submitted to JIPID, July 1994
A:Description: Separation and characterization of Arabidopsis proteins by two-dimensiona
A:Reference number: PA0001
A:Accession: PA0015
A:Molecule type: protein
A:Residues: 1-14 < KAM>
A:Experimental source: seed
C:Keywords: pyroglutamic acid; seed; storage protein
F:1/Modified site: pyrrolidone carboxylic acid (Gin) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C:Species: Phyllomedusa bicolor (two-colored leaf frog)
C:Date: 10-Dec-1993 #sequence_revision 13-Mar-1997 #text_change 31-Mar-2000
C:Accession: S36662
R:Mignogna, G: Severini, C: Simmaco, M.; Negri, L.; Falconieri Erspamer, G.; Kreil, G.
FEBS Lett. 302, 151-154, 1992
A:Title: Identification and characterization of two dermorphins from skin extracts of the A; Reference number: S21152; MUID:92339502
A:Accession: S36662
Search completed: December 21, 2000, 08:37:13 Job time: 317 sec
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A;Molecule type: protein
A;Residues: 1-7 <MIG>
                                                                                                                                                                                                                            Query Match 20.7
Best Local Similarity 50.0
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 20.7%;
Best Local Similarity 60.0%;
Matches 3; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 FGFPE 11
||:|:
3 FGYPK 7
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                                                                                                                                                                            4 QMDFGFPEHL 13
                                                                                                                          QQYLGVPEQL 10
                                                                                                                                                                                                                                                    20.7%;
                                                                                                                                                                                                                            Score 23; DB 2; Length 14;
Pred. No. 1e+03;
0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 23; DB 2; Length 7; Pred. No. 1.8e+05; 2; Mismatches 0; Indels
                                                                                                                                                                                                                         5; Indels
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Hypertension 11, 21-27, 1988
A;Title: Purification and partial characterization of A;Ritle: Purification and partial characterization of A;Reference number: A60834; MUID:88113996
A;Recession: A60834
A;Molecule type: protein
A;Residues: 1-15 <OLI>C;Superfamily: antithrombin III
C;Keywords: 9lycoprotein; plasma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             angiotensin I precursor - dog (fragment)
N;Alternate names: angiotensinogen I
N;Contains: angiotensin I
C;Species: Canis lupus familiaris (dog)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 13-Mar-1998
C;Accession: A60834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
A60834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
B31769
B31769
C:Species: Homo sapiens (man)
C:Species: Homo sapiens (man)
C:Species: Homo sapiens (man)
C:Species: Homo sapiens (man)
C:Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 05-Nov-1999
C:Accession: B31769
R;Loh, E.Y.; Cwirla, S.; Serafini, A.T.; Phillips, J.H.; Lanier, L.L.
Proc. Natl. Acad. Sci. U.S.A. 85, 9714-9718, 1988
A;Title: Human T-cell-receptor delta chain: genomic organization, diversity.
A;Reference number: A94221; MUID:89071766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вb
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Best Local Similarity
"herhes 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Oliver, J.A.
glutathione transferase (EC 2.5.1.18) 1 - Arabidopsis thaliana (fragment) G:Species: Arabidopsis thaliana (mouse-ear cress) C:Date: 22-Dec-1995 *sequence_revision 08-Feb-1996 *text_change 15-Jun-1996 C:Accession: PMOI75 R:Tsugita, A.; Kamo, M.; Kawakami, M.; Ohki, Y. Submitted to JIPID, December 1995 A:Description: Two dimensional electrophoresis of plant proteins and stand A:Reference number: PMO173
                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:L36386;
C;Keywords: T-cell receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
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                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-17 <LOH>
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PN0175
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5; Conservative
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Pred. No. 8.6e
3; Mismatches
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8.6e+02;
7;
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         RESULT 14
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dermorphin (Lys-7) [validated] - two-colored leaf
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A;Accession: PN0175
A;Molecule type: protein
A;Residues: 1-18 <TSU>
A;Experimental source: leaf
C;Keywords: transferase
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A;Experimental source: Strain Orsay
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;anonymous, Genoscope submitted to the EMBL Data Library, July 1999 A;Description: Pyrococcus abyssi genome sequence: insights into archaeal chromosome s A;Reference number: A75001 A;Accession: H75063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hypothetical protein PAB7382 - Pyrococcus abyssi (strain Orsay)
C:Species: Pyrococcus abyssi
C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 20-Aug-1999
C;Accession: H75063
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A; Residues: 1-18 <KAW>
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R;Guerin, B.; Bukusoglu, C.; Rakotomanana,
J. Biol. Chem. 265, 19736-19741, 1990
                                                                                                                                                                                                                                                                                                     ADP.ATP carrier protein - yeast (Candida parapsilosis) (fragment)
C:Species: Candida parapsilosis
C:Date: 28-Jun-1991 #sequence_revision 28-Jun-1991 #text_change 07-Jun-1996
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Best Local Similarity
The has 4; Conserv
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                                                                                                                                                                                                     A; Reference number: A; Accession: A37984
                                                                                                                                                                                                                       A; Title: Mitochondrial phosphate transport. A; Reference number: A37984; MUID:91060585
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Pred. No. 9.26
5; Mismatches
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Pred. No. 9.2e+02;
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Pred. No.
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1e+03;
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9.2e+02;
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R;Alemany, V.; Aligue, R.
submitted to the EMBL Data Library, May 1996
A;Reference number: 222873
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R:Concon1, M.; Szweda, L.I.; Levine, R.L.; Stadtman, E.R. Arch. Blochem. Blophys. 331, 232-240, 1996
A:Title: Age-related decline of rat liver multicatalytic A:Reference number: S71306; MUID:96299287
A:Accession: S71306
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                                                                                                                                                                                 A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-16 <ALE>
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 11-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 17-Apr-1998
C;Accession: S71306
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A;Accession: S59492
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formate dehydrogenase alpha chain - Alcaligenes eutrophus (fragment)
C:Species: Alcaligenes eutrophus
C:Date: 27-Apr-1996 #sequence_revision 13-Mar-1997 #text_change 07-May-1999
C:Accession: S59492
R:Friedebold, J.; Mayer, F.; Bill, E.; Trautwein, A.X.; Bowien, B.
Biol. Chem. Hoppe-Seyler 376, 561-568, 1995
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                                                                  Score 25; DB; Pred. No. 5.5; Pred. No. 5.5
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Pred. No. 5.1e+02;
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Pred. No. 3.5e+02
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5.5e+02;
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6-phosphofructokinase (EC 2.7.1.11) B - rabbit (fragment)
N; Alternate names: phosphofructo-1-kinase B
C; Species: Oryctolagus cuniculus (domestic rabbit)
C; Date: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change
C; Accession: S03879
R; Valaitis, A.P.; Foe, L.G.; Kwiatkowska, D.; Latshaw, S.P.; Kem
Biochim, Biophys. Acta 995, 187-194, 1989
A; Title: The sites of phosphorylation of rabbit brain phosphofru
A; Reference number: S03878; MUID:89194250
A; Accession: S03879
A; Molecule type: protein
A; Residues: 1-13 < VAL>
A; Residues: 1-13 < VAL>
                                                                                                                                                                                                                                                                                     anglotensin precursor - horse (fragment)
C;Species: Equus caballus (domestic horse)
C;abte: 31-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 20-Mar-1998
C;Accession: A92775; A01250
R;Skeggs Jr., L.T.; Kahh, J.R.; Lentz, K.; Shumway, N.P.
J. Exp. Med. 106, 439-453, 1957
A;Reference number: A92775
A;Rocession: A92775
C:Superfamily: antithrombin III
C:Keywords: blood pressure control; hormone; vasoconstrictor
F:1-10/Product: angiotensin I *status experimental <AN1>
F:1-8/Product: angiotensin II *status experimental <AN2>
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S03879
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A;Molecule type: protein
A;Residues: 1-14 <SHI>
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C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
C;Accession: B61997
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ALIGNMENTS

octamer-binding protein, Ku-like, 72K chain - human (fragment) C;Species: Homo sapiens (man) C;Date: 30-Dec:1991 #sequence_revision 30-Dec:1991 #text_change 30-Sep-1993

RESULT A39504

C; Accession: A39504

A; Molecule type: protein A; Residues: 1-19 <MAY>

Length 19;

A; Status: preliminary

R;May, G.; Sutton, C.; Gould, H.
J. Biol. Chem. 266, 3052-3059, 1991
A;Title: Purification and characterization of Ku-2, an octamer-binding protein relate A;Reference number: A39504; MUID:91131605
A;Accession: A39504

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R;Schirch, D.M; Wilson, J.E.
A;Schirch, D.M; Wilson, J.E.
A;Title: Rat brain hexokinase: amino acid sequence at the substrate hexose binding A;Title: Rat brain hexokinase: AUDID:87324917
A;Reference number: A90080; MUID:87324917
A;Roccession: A32521
A;Molecule type: protein
A;Residues: 1-21 SCH>
C;Superfamily: human hexokinase I; hexokinase homology
C;Keywords: ATP; glycolysis; phosphotransferase
                                                                                                                                                                                                                                                                                                                                          hexokinase (EC 2.7.1.1) I peptide III - rat (fragment) C;Species: Rattus norvegicus (Norway rat) C;Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #te
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pred. No. 2.2e+02;
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                                                                                                  Bradford A.M., Raftery M.J., Bowie J.H., Tyler N. Adams G.W., Severini C.;

"Novel uperin peptides from the dorsal glands of floodplain toadlet Uperoleia inundata.";

Aust. J. Chem. 49:475-484(1996).

-- FUNCTION: SHOWS A MEDIUM ANTIBACTERIAL ACTIVE.

L.MESENTERIODES AND S.UBERIS.

-- TISSUE SPECIFICITY: SECRETED BY THE SKIN DOTH ANS SPECIFICITY: MM-1940; METHOD-FAB.

Amphibian skin; Antibiotic.

SEQUENCE 19 AA; 1941 MW; 5E94C6C757B463D9 CI
                                                                                                                                                                                                                                                                                                                                                                                     UPEIN
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30-MAY-2000
30-MAY-2000
                                                                                                                                                                                                                                                                         Uperoleia inundata (Floodplain toadlet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphhibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
                                                                                                                                                                                                                                            SEQUENCE,
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30-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "NOVEL uperin peptides from the dorsal glands of the australian floodplain toadlet Uperoleia inundata.";
Aust. J. Chem. 49:475-484(1996).
-1- FUNCTION: SHOWS A MEDIUM ANTIBACTERIAL ACTIVITY AGAINST L.MESENTERIODES, M.LUTEUS AND S.UBERIS.
-1- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
-1- MASS SPECTROMETRY; MW-1926; METHOD-FAB.
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TISSUE-SKIN SECRETION;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
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SEQUENCE 19 AA; 1927 MW;
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                                                                                                                                                          ACTIVITY AGAINST M.LUTEUS
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                                                                              STRAIN-UMS;

MEDLINE; 90055678.

Kraut M., Hugendieck I., Herwig S., Meye
"Homology and distribution of CO dehydro
f carboxydotrophic bacteria.";
L Arch. Microbiol. 152:335-341(1989).
C -:- CATALYTIC ACTIVITY: CO + H(2)O + FE
C 2 H(+) + FERRICYTOCHROME B-561.
C COFACTOR: MOLYBDENUM.
C -:- COFACTOR: MOLYBDENUM.
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Best Local
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01-FEB-1991
01-FEB-1991
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                    Pseudomonas carboxydovorans.
Bacteria; Proteobacteria; alpha su
Bradyrhizobium group; Oligotropha.
                  Oxidoreductase; Molybdenum NON_TER 21 21
                                                           PIR;
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01-FEB-1991 (Rel. 17, Last sequence up
01-JUN-1994 (Rel. 29, Last annotation
CARBON MONOXIDE OXYGENASE [CYTOCHROME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PSECA
DCMS_PSECA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Electrophoresis 18:2795-2802(1997).
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15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
PUTATIVE SUCCINYL-COA LIGASE [GDP-FORMING] BETA-CHAIN (EC
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TISSUE-HEART;
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SUBCELLULAR LOCATION: MITOCHONDRIAL (BY SIMILARITY)
SIMILARITY: TO OTHER BETA SUBUNITS OF SUCCINYL-COA
OF MALATE--COA LIGASE AND TO ATP CITRATE-LYASE.
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PRESULT DEPARTMENT OF THE PROPERTY OF THE PROP
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Best Local S
Matches 3
                                                                                                                                                                                                                                                               Comp. Biochem. Physiol. 119B:289-292(1998).
11- FUNCTION: REMOVES N-TERMINAL DIPEPTIDES SEQUENTIALLY
POLYPEPTIDES HAVING UNSUBSTITUTED N-TERMINI PROVIDED
PENULTIMATE RESIDUE IS PROLINE. BINDS AND REGULATES T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DIPEPTIDYL
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INTERPRO; IRRO00194; -.
PROSITE; PSO0152; ATPASE_ALPHA_BETA; PARTIAL.
ATP synthesis; Chloroplast; Thylakoid membrane;
Hydrolase; ATP-binding; Hydrogen ion transport.
NON TER 21
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Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                             Ben-Shooshan I., Parola A.H.;
"The CP-I subunit of adenosine deaminase
kidney is identical to human, mouse, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BOVIN
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MEDLINE; 97275459.
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"Cytokinin affects nuclear-
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                           POLYPEPTIDE.
SUBCELLULAR LOCATION: TYPE II MEMBRANE PROTEIN.
A SOLUBLE FORM (BY SIMILARITY).
PTM: THE SOLUBLE FORM (SDPP) DERIVES FROM THE ME
BY PROTEOLYTIC PROCESSING.
                                                                                                                                                                                                        CATALYTIC ACTIVITY:
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CORE - AND CF(0) - THE MEMBRANE PROTON CHANNEL. CF(
SUBUNITS: ALPHA(3), BETA(3), GAMMA(1), DELTA(1), EF
HAS THREE MAIN SUBUNITS: A, B AND C.
SUBCELLULAR LOCATION: CHLOROPLAST THYLAKOID MEMBRAN
   BY PROTEOLY:
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3; Conserv
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3 (Rel. 37, Last sequence update)
9 (Rel. 38, Last annotation update)
PEPTIDASE IV (EC 3.4.14.5) (DPP IV)
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SEQUENCE
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Int. J. Biochem. Cell Biol. 29:911-919(1997).
-i- FUNCTION: HAS CYTOTOXIC ACTIVITY (BY SIMILARITY).
-i- CATALVIIC ACTIVITY: A L-AMINO ACID + H(2)O + O(2) - A 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ahn M.Y., Lee B.M., K. "Characterization and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ponnudurai G., Chung M.C.M., Tan N.-H.;
"purification and properties of the L-amino
pit viper (Calloselasma rhodostoma) venome.";
Arch. Biochem. Biophys. 313:373-378(1994).
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                                                                                                                                                                                                                                                                                                                         -!- COFACTOR: FAD.
-!- SUBUNIT: HOMODIMER (PROBABLE).
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INTERPRO; IPRO02471; -
                                                                                                                                                                                                                                                                                    -1- SIMILARITY: BELONGS TO THE FLAVIN MONOAMINE OXIDASE FAMILY
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Noreductase; Flavoprotein;
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S (IN REF. 2).
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RESULT 12 UP21_UPEIN

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RESULT 7

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Matches 5
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- i- SUMILARITY: BELONGS
ELYBASE; FB9n0010375; M
INTERPRO; IPRO01844; - ...
PROSITE; PS00296; CHAPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NON_TER
NON_TER
SEQUENCE
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P56923;
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MEDLINE; 97175050.
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                    DCMM_PSECF STANDARD; PRT; 14 AA P19914; 01-FEB-1991 (Rel. 17, Created) 01-FEB-1991 (Rel. 17, Last sequence update) 01-DEC-1992 (Rel. 24, Last annotation updat CARBON MONOXIDE DEHYDROGENASE MEDIUM CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Temporins,
temporaria."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Amphibia;
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30-MAY-2000 (Rel.
30-MAY-2000 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                  Amphibian skin;
MOD_RES 11
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    Pseudomonas
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MACROMOLECULAR ASSEMBLY. MAY FACILITATE THE CORRECT FOLDING OF IMPORTED PROTEINS. MAY ALSO PREVENT MISFOLDING AND PROMOTE THE REFOLDING AND PROPER ASSEMBLY OF UNFOLDED POLYPEPTIDES GENERATIONER STRESS CONDITIONS IN THE MITOCHONDRIAL MATRIX (BY
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SIMILARITY: BELONGS TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 J. Biochem. 242:788-792(1996).
FUNCTION: HAS ANTIBACTERIAL ACTIVITY
GRAM-POSITIVE BACTERIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            FAMILY.
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2; Conserv
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5; Conserv
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ATP-binding; Mitochondrion
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1194 MW;
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Anura; Neobatrachia; Ranoidea;
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Last sequence up
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ta; Craniata;
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Pred. No. 1.5e
6; Mismatches
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Pred. No.
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1.5e+03;
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                            1.2.99.2)
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Ranidae; Rana
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MDH_SYN 4

MDH_SYN 4

ID MDH 5

P8046

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ATPB_PHYPA
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Best Local S
Matches 4
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Best Local
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15-JUL-1998 (Rel. 36, I
30-MAY-2000 (Rel. 39, I
MALATE DEHYDROGENASE (I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P80460;
15-JUL-1998
15-JUL-1998
30-MAY-2000
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                                P80658;
01-OCT-1996
01-OCT-1996
01-NOV-1997
ATP SYNTHASE
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Oxidoreductase; Tricarboxylic an
NON_TER 16 16
SEQUENCE 16 AA; 1780 MW. 619
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Submitted
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NON_TER 14
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                   ATPB
                                                                                                                          ATPB_PHYPA
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Physcomitrella
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SUBUNIT: CONSISTS OF
                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                     3 LQMDFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                        erstad K., Synstad B., Sirevag R.;
mitted (SEP-1996) to the SWISS-PROT data
CTALLYTIC ACTIVITY: L-MALATE + NAD(+) =
SUBUNIT: HOMODIMER (BY SIMILARITY).
SIMILARITY: BELONGS TO THE LDH FAMILY. N
PERPRO; IPRO01252; -
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                                    SYNTHASE
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Cyanobacteria; Chroc
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                                                                                                                                                                                                                                                       8
                                (Rel. 34, Created)
(Rel. 34, Last sequence update)
(Rel. 35, Last annotation update)
3 BETA CHAIN (EC 3.6.1.34) (FRAGMENT).
                                                                                                                                                                                                                    14
                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PL0142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Molybdenum
patens (Moss)
                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last sequence up, Last annotation (EC 1.1.1.37) (F)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18
15
                                                                                                                                                                                                                                                                                                              18
66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MW.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       THREE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chroococcales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
Pred.
                                                                                                                                                                                                                                                                                           Score 20; DB
Pred. No. 2.3e
0; Mismatches
                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65583C6D1FB7C25B
                                                                                                                                                                                                                                                                                                                                                                                       61D1896F14E81984 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6714)
                                                                                                                                                                                                                                                                                                                                                                                                                         acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POLYPEPTIDE
                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                dehydrogenase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             e update)
ion update)
(FRAGMENT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              +
                                                                                                                                                                                                                                                                                                                                                                                                                         cycle;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Meyer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
2e+03;
                                                                                                                              21
                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synechocystis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0::
                                                                                                                                                                                                                                                                                                                3e+03;
                                                                                                                              AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAINS: LARGE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MDH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Comamonadaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    bank.
OXALOACETATE +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  structural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 14;
                                                                                                                                                                                                                                                                                                                               Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              co(2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              +
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NADH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                               0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'n
                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AND
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0;

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RT "ISOLBILIU" .....

RT and chick muscle.";

RL J. Cell Biol. 107:687-697(1988).

CC -I- FUNCTION: CALSEQUESTRIN IS A HIGH-CAPACITY, MODERATE AFFINITY,

CC CLCIUM-BINDING PROTEIN AND THUS ACTS AS AN INTERNAL CALCIÚM STORE

CC CALCIUM-RELEASE OF CALCIUM BOUND TO CALSEQUESTRIN THROUGH

CC IN MUSCLE. THE RELEASE OF CALCIUM BOUND TO CALSEQUESTRIN THROUGH

CC A CALCIUM RELEASE CHANNEL TRIGGERS MUSCLE CONTRACTION. BINDS 40

CC TO 50 MOLES OF CALCIUM. ALSO BINDS LAMININ.

CC -I- SUBCELLULAR LOCATION: THIS ISOFORM OF CALSEQUESTRIN OCCURS IN THE

CC SARCOPLASMIC RETICULUM'S TERMINAL CISTERNAE LUMINAL SPACES OF

CC FAST SKELETAL MUSCLE CELLS. ASPARTACTIN IS FOUND IN THE BASAL

CC LAMINA SURROUNDING INDIVIDUAL MUSCLE FIBERS.

CC -I- TISSUE SPECIFICITY: SKELETAL AND HEART MUSCLE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
                                                                                                                        A PROCESS OF THE PROC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
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    Matches
                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 5; Conser
                                                                                                                        NON_TER
SEQUENCE
                                                                                                                                              Oxidoreductase; Mitochondrion.
NON_TER 20 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Thunnus obesus (Bigeye tuna).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Meopterygii; Teleostei; Euteleostei; Neoteleostei
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Scombro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
CYTOCHROME C OXIDASE POLYPEPTIDE VIIB-HEART (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PIR; A31049; A31049.
INTERPRO; IPRO01393;
PROSITE; PS00864; CALSEQUESTRIN_2; PAR;
PROSITE; PS00863; CALSEQUESTRIN_1; 1.
Muscle; Glycoprotein; Calcium-binding.
NON_TER
20
20
                                                                                                                                                                                                                                                                                                                                                                                 Arnold S., Le
Kadenbach B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scombridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P80980;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE.
MEDLINE; 88331073.
Hall D.E., Frazer K.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 97454291.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-HEART
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COXN_THUOB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hall D.E., Frazer K.A., Hann B.(
"Isolation and characterization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota;
                                                                                                                                                                                                                                                                                                                                                        The subunit structure of cytochrome-c
                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                       J. BIOCHEM. 248:99-103(1997).
FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDAS MITOCHONDRIAL ELECTRON TRANSPORT.
                                                                                                                                                                                             4 FERRICYTOCHROME C
                                                                                                                                                                                                                   CATALYTIC ACTIVITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FPEHLLVD 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FPEYDGVD 13
       Similarity
4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Metazoa; Chordata;
Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                    Lee I.,
                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 AA; 2238 MW; 92ADE04FC2A69280 CRC64;
       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thunnus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                        AΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                       Kim M.,
                                                                                                                      20
2303
                               19
57
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62
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                           18;
                                                                                                                                                                                                                 4 FERROCYTOCHROME
                                                                                                                        MW;
                                                                                                                                                                                                                                                                                                                                                                                                    Song E., Linder D.,
  Score 22; DB
Pred. No. 1.4e
0; Mismatches
       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B.C.,
ion of
                                                                                                                        0A33BD34006E5AA6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NO ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Reichardt L.F.; a laminin-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                          oxidase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.4e+03;
                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                        .4e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (EC 1.9.3.1) (FRAGMENT).
                                                                                                                        CRC64
                                                                                                                                                                                                                 0(2) = 2 \text{ H}(2)0
                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20
                                                                                                                                                                                                                                                                                                                                                          from
                                                                                                                                                                                                                                                                                                                                                                                                    Lottspeich F.,
                                                                                                                                                                                                                                                               OXIDASE
       Indels
                                                                                                                                                                                                                                                                                                                                                          tuna heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Neoteleostei;
                                                                                                                                                                                                                                                                                      POLYPEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scombroidei;
  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THROUGH
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                                                                                                                                                                                                                                                                                                                                                        and
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Gaps
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  0,
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RESULT 4
SAMP_MUSCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
Garcia-Bellido A.;
Garcia-Bellido A.;
"Identification of Drosophila wing imaginal cidentification of Drosophil
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CH60_DROME
P35380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SAMP_MUSCA
P19095;
01-NOV-1990
                                                                                                                                                                                                                         Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda;
Pterygota; Neoptera; Endopterygota; Diptera; Brachyoc
Ephydroidea; Drosophilldae; Drosophila.
                                                                                                                                                                                                                                                                                                                                           01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
MITOCHONDRIAL MATRIX PROTEIN P1 (60 KDA CHAPERONIN) (HEAT SHOCK PROTEIN 60) (HSP-60) (PROTEIN CPN60) (GROEL PROTEIN) (FRAGMENT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NON_TER
SEQUENCE
                                                                                                            MEDLINE; 93272852.
Santaren J.F., van
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mustelus canis (Smooth dogfish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes; Triakidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1990 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
SERUM AMYLOID P-COMPONENT (SAP) (FRAGMENT).
                                                                                                                                                               STRAIN-VALLECAS;
                                                                                                                                                                                                                                                                                                                          MMP-P1 OR HSP60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -1- DISEASE: SAP IS A PRECURSOR OF AMYLOID COMPONENT P WHICH IS FOUND IN BASEMENT MEMBRANE AND ASSOCIATED WITH AMYLOID DEPOSITS.
-1- SIMILARITY: BELONGS TO THE PENTAXIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              component.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    dogfish, Mustelus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Robey F.A., Tanaka T., Liu T.-Y.; "Isolation and characterization c
                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -i- SUBBURI: 100-10097-3099 (1903).
-i- SUBBURI: HOMODENTAMER. PENTAXIN (OR PENTRAXIN)
ARRANGEMENT OF 5 NONCOVALENTLY BOUND SUBBURITS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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ALIGNMENTS

A01250. A01 XERGES L.T. Jr., Kahn J.R., Lentz K., Shumway N.P.; XF "The preparation, purification, and amino acid sequence of a YThe preparation substrate."; ZI J. Exp. Med. 106:439-453(1957). ZI J. Exp. Med. 106:439-453(1957). ZI CLEAVES ANGIOTENSIN I, FROM ANGIOTENSINGEN. ACE (ANGIOTENSIN YOU CLEAVES ANGIOTENSIN I, FROM ANGIOTENSINGEN. ACE (ANGIOTENSIN YOU CONVERTING ENZYME) THEN REMOVES A DIPEPTIDE TO YIELD THE YOUNG CONVERTING ENZYME) THEN REMOVES A DIPEPTIDE TO YIELD THE YOU CONVERTING ENZYME) THEN REMOVES A DIPEPTIDE TO YIELD THE YOU CONVERTING ENZYME) THEN REMOVES A DIPEPTIDE TO YIELD THE YOU CONVERTING ENZYME) THE NETWOOD TO YELD THE YOU CONVERT OF BODY FLUIDS. YOU CONVERT ON THE SERPIN FAMILY. YOU CONVERT ON THE PLASMA. YOU CONVERT ON THE SERPIN FAMILY. Query Match Best Local Similarity Matches 5; Conserv T_HORSE ANGT_HORSE P01016; P01016; 21-JUL-1986 21-JUL-1986 01-FEB-1996 21-JUL-1986 (Rel. 01, Created) 21-JUL-1986 (Rel. 01, Last sequence up 01-FBB-1996 (Rel. 33, Last annotation ANGIOTENSINOGEN (FRAGMENT). Eguus caballus (Horse). Eukaryota; Metazoa; Chordata; Crani Mammalia; Eutheria; Perissodactyla; 10 PEHLLV 15 7 PEHLLV 12 Conservative STANDARD; SERPIN; PARTIAL. 14 1759 MW; 21.6%; 83.3%; Serpin. Score 24; DB 1; Pred. No. 4.6e+02; 0; Mismatches 1 2E9921F8EEEFBDD7 Craniata; Vertebrata; ctyla; Equidae; Equus. ANGIOTENSIN ANGIOTENSIN on update) 14 A CRC64; Length 14; Indels Euteleostomi; THE ENZYME RENIN 0; Gaps

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Q9PS42;
01-MAY-2000
01-MAY-2000
EMBL; U93
NON_TER
SEQUENCE
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GUAA.
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01-JAN-1998 (TrEMBLrel.
01-NOV-1998 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                     MEDLINE; 92406903.

Nakai K., Ward A.M., Gannon M., Rifkind A.B.;

"Beta-naphthoflavone induction of a cytochrome P-450 arachidonic epoxygenase in chick embryo liver distinct from the aryl hydrocar hydroxylase and from phenobarbital induced arachidonate epoxygena J. Biol. Chem. 267:19503-19512(1992).

SEQUENCE 22 AA; 2377 MW; 6BA9C990EE33E9C1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                "The Borrelia burgdorferi circular plasmid structure and targeted inac Mol. Microbiol. 25:361-374(1997).
                                                                                       STRAIN-G25
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
PHENOBARBITAL-INDUCED 48 KDA CYTOCHROME P-450 (FRAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Menting J.G., Cornish E., Scopes R.K.;

"Purification and partial characterization of NADPH-cytochrome reductase from Petunia hybrida flowers.";

Plant Physiol. 106:643-650(1994).

SEQUENCE 20 AA; 2390 MW; 8BCDA6F8CF7EEDEE CRC64;
                                                                   Tilly K.,
                                                                            MEDLINE; 97426044
                                                                                              SEQUENCE FROM N.A.
                                                                                                                 Bacteria;
                                                                                                                            Borrelia
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; Spirochaetales;
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08FAB9BB0E0BC720 CRC64;
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Pred. No. 2
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01-JAN-1998
01-JAN-1998
01-NOV-1998
Stevenson B., Barthold S.W.; "Expression and sequence of outer surface protein American isolates of Borrelia burgdorferi."; FEMS Microbiol. Lett. 124:367-372(1994). EMBL; U93694; AAC45522.1; -. EMBL; U04280; AAC45543.1; -.
                                                                                                                                                                             "The Borrelia burgdorferi circular plasmid structure and targeted inac Mol. Microbiol. 25:361-374(1997).
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"The
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STRAIN-CT39 (ILL-1),
MEDLINE; 97426044.
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Tilly K., Casjens
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Bacteria; Spirochaetales;
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                                                                                                          SEQUENCE FROM N.A. STRAIN=DN127CL9-2, MEDLINE; 95154673.
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Bacteria; Spirochaetales;
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01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
PRO ALPHAI TYPE II COLLAGEN (FRAGMENT).
Oryctolagus cuniculus (Rabbit).
Cutatyota, Metazoa; Chordata; Craniata; Vertebrat
Mammalia; Eutheria; Lagomorpha; Leporidae; Orycto
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"Evidence for insufficient chondrocytic differentiation of full-thickness defects of articular cartilage.";
Matrix Biol. 15:39-47(1996).
EMBL; S83370; AAB50773.1; -.
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Matches 6
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01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
CALMODULIN KINASE 2 (FRAGMENT).
Schizosaccharomyces pombe (Fission yeast).
Eukaryota; Fungi; Ascomycota; Schizosaccharomycetales;
Schizosaccharomycetaceae; Schizosaccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9PS70 PRELIMINARY; PRT; 19 AA.
Q9PS70;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
LOW DENSITY LIPOPROTEIN RECEPTOR-RELATED PROTEIN.
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Submitted (MAY-1996) to t
EMBL; U57982; AAD09466.1;
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                                                                                                                                                                                                                                                                                             receptor-related proteins.";
J. Biol. Chem. 266:19079-19087(1991).
SEQUENCE 19 AA; 1861 MW; 4EEC931205620608
                                                                                                                                                                                                                                                                                                                                                                                                                        Gallus gallus (Chicken).
Eukaryota; Metazoa; Chor
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Schneider W.J.,
                                                                            Q9S878;

Q1-MAY-2000 (TrEMBLrel. 13, Created)

Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)

Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)

NADPH-CYTOCHROME P450 REDUCTASE (EC 1.6.2.4) (FRAGMENT).
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                                                                                                                                                                                                                                                                                                                                                                                                             Archosauria;
                                           Petunia hybrida (Petunia).
Eukaryota; Viridiplantae; Embryophyta;
Magnoliophyta; eudicotyledons; Asterid
                                                                                                                                    Q9S878
                                 Solanaceae;
 MEDLINE;
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                                   Petunia
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Neognathae; Galliformes;
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mes; Phasianidae; Phasianinae;
                                               Tracheophyta;
ae; euasterids
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O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2000 (TrEMBLrel. 14, Last sequence update)
O1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
40 KDA GAP JUNCTION PROTEIN (FRAGMENT).
Heliothis virescens (Noctuid moth) (Owlet moth).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;
Noctuoldea; Noctuidae; Heliothinae; Heliothis.
                         EMBL; AI
                                          Submitted (DEC-1999) to the EMBL; AL035398; CAB63074.1;
                                                                                                                                                     Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                         O9UGS1;
O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DJ796I17.4 (NOVEL PROTEIN SIMILAR TO GS2) (FRAGMENT).
DJ796I17.4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "immunocytochemical, electrophoresis, and immunoblot Heliothis virescens gap junctions isolated in the pr of protease inhibitors." Cell Tissue Res. 281:179-186(1995).
SEQUENCE 20 AA: 2304 MW; A298D3EB3E89586B CRC64;
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"The flyK motility operon of Borrelia
sigma 70-like promoter.",
Microbiology 143:1581-1590(1997).
EMBL: U62901; AAB62742.1; -..
NON_TER 21 21
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    SEQUENCE
                                                                                                                SEQUENCE FROM N.A.
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Pred. No. 3.5e
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  AF7740ABECB69AA6 CRC64;
                                                                                                                                                     Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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A MIZULINI A., Usuda N., Tokumıtızı.

A Mizutani A., Usuda N., Tokumıtızı.

A Kobayashi R., Hidaka H.;

T "CAP-50, a newly identified annexin, localizes in fibroblast 3Y1 cells.";

RI J Biol. Chem. 267:13498-13504(1992).

TORIENCE 14 AA; 1446 MW; C8322EB96DD9C6C6 CRC
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Q9TRQ7;
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01-MAY-2000 (TrEMBLrel. 13, Las
01-MAY-2000 (TrEMBLrel. 13, Las
CALCYCLIN-ASSOCIATED PROTEIN PR
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Q9S8E1;
O1-MAY-2000 (TrEMBL)
O1-MAY-2000 (TrEMBL)
O1-JUN-2000 (TrEMBL)
ANNEXIN (FRACMENT)
                                                                                                                                                                              aggregation.";
Biochem. Mol. Biol. Int. 35:749-755(1995).
SEQUENCE 22 AA; 2465 MW; A36D11A1FE311F0F CRC64;
                                                                                                                                                                                                                                                                                                                                                Capsicum annuum (Bell pepper).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta;
Magnoliophyta; eudicotyledons; Asteridae; euasterids
Solanaceae; Capsicum.
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Mammalia; Eutheria;
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Hoshino T., Mizutani A.,
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SPTREMBL_14:*

1: sp_bacteria
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3: sp_fungi:*
4: sp_human:*
5: sp_inverteb:
6: sp_mammal:*
7: sp_mhc:*
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SUMMARIES

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Q9TRR6;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
CALCYCLIN-ASSOCIATED PROTEIN, CAP50=CA2+/PHOSPHOLIPID-BINDING PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                             SEQUENCE.

MEDLINE; 92250478.

MEDLINE; 92250478.

MIZUTANI A., Minami H., Kobayashi R., Hidaka H.;

Tokumitsu H., Mizutani A., Minami H., Kobayashi R., Hidaka H.;

Tokumitsu H., Mizutani A., Minami H., Kobayashi R., Hidaka H.;

"A calcyclin-associated protein is a newly identified member o

"A calcyclin-associated proteins, annexin family.";

ca2+/phospholipid-binding proteins, annexin family.";

J. Biol. Chem. 267:8919-8924(1992).

SEQUENCE 19 AA; 2018 MW; 9A54062504B8322E CRC64;
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          p70861;
p170861;
01-FEB-1997 (TrEMBLrel. 02, Created)
01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
THDF (FRAGMENT).
Borrelia burgdorferi (Lyme disease spirochete).
Becteria; Spirochaetales; Spirochaetaceae; Borrelia.
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Pred. No. 1.6e+02;
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J. Acquir. Immune Defic. Syndr. Hum. Retrovirol. 12:6-18(1996).
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Submitted (JAN-1996) to the EMBL/GenBank/DDBJ
EMBL; U45045; AABO4196.1; -.
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Viruses; Retroid viruses; Retroviridae; Lentivirus
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Cleland A., Watson H.G., Robertson P., Ludlam C.A., Brown A.J.;
Cleland A., Watson H.G., Robertson P., Ludlam C.A., Brown A.J.;

"Evolution of zidovudine resistance-associated genotypes in human
immunodeficiency virus typė 1-infected patients.";
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SEQUENCE FROM N.A.
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Submitted (JAN-1996)
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Leigh Brown A.J.;
Submitted (JAN-1996) to the EMBL/GenBank/DDBJ
EMBL; U45037; AAB04188.1; -
RNA-directed DNA polymerase.
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                        STRAIN-PATIENT P74;
Leigh Brown A.J.;
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Viruses; Retroid viruses; Retroviridae;
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         SEQUENCE FROM N.A. STRAIN-PATIENT P74; MEDLINE; 96242958. Cleland A., Watson H
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"Evolution of zidovudine resistance-associated genotypes in human
immunodeficiency virus type 1-infected patients.";
J. Acquir Immune Defic. Syndr. Hum. Retrovirol. 12:6-18(1996).
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MEDLINE; 96242958.
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Robertson P., Ludlam C.A., Brown A.J., resistance-associated genotypes in human
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REVERSE TRANSCRIPTASE ()
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Viruses: Retroid viruses; Retroviridae;
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Submitted (JAN-1996) to
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acquir. Immune Defic. Syndr. Hum. Retrovirol. 12:6-18(1996).
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                                                               EMBL; U45035; AAB04186.1; -. RNA-directed DNA polymerase.
                                                                                 Submitted (JAN-1996) to the EMBL; U45035; AAB04186.1;
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Viruses; Retroid viruses; Retroviridae;
  SEQUENCE
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                                                                        Q9WLD2
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"Molecular evidence for distinct genotypes
"Molecular evidence for distinct genotypes
"Molecular evidence for distinct genotypes
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RNA-directed DNA polymerase.
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Submitted (JAN-1996) to the
EMBL; U45053; AAB04204.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-20620,
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Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
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Viruses; Retroid viruses; Retroviridae;
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, AF082804; AAC34447.1; -.
, AF082812; AAC344111.1; -.
, AF082813; AAC34114.1; -.
, AF082814; AAC34117.1; -.
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lack D.;
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Pred. No. 1.5e
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Pred. No.
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1.5e+02;
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Q73463;
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Q73461;
01-NOV-1996
01-NOV-1998
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CleLand A., Watson H.G., Robertson P., Ludiam c.n., Cleland A., Watson H.G., Ludiam c.n., 
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NON_TER
SEQUENCE
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Viruses; Retroid viruses; Retroviridae;
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"Molecular evidence for distinct genotypes of monkey B virus
"Molecular evidence for distinct genotypes of monkey B virus
(Herpesvirus simiae) which are related to the Macaque host species.";
J. Virol. 0:0-0(1998).
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Pred. No. 1.5e+02;
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107
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

1 2 3 4 4 4 4 4 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1	Result No.
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ALIGNMENTS

RESULT Q73487 ID Q AC Q DT 0 DT 0 DT 0	Qui Bei Ma Ma Qy	RESULT OCC OCC OCC OCC OCC OCC OCC OCC OCC OC
JULT 2 9487 Q73487 PRELIMINARY; PRT; 18 AA. Q73487; 01-NOV-1996 (TrEMBLrel. 01, Created) 01-NOV-1996 (TrEMBLrel. 01, Last sequence update) 01-NOV-1998 (TrEMBLrel. 08, Last annotation update) REVERSE TRANSCRIPTASE (FRAGMENT).	Query Match 31.8%; Score 34; DB 3; Length 17; Best Local Similarity 75.0%; Pred. No. 27; Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 12 QOHSVAYT 19	800 800 906800; 01-NOV-1996 (TrEMBLrel. 01, Created) 01-NOV-1996 (TrEMBLrel. 01, Last sequence update) 01-NOV-1998 (TrEMBLrel. 08, Last annotation update) N1780. N1780. Saccharomyces cerevisiae (Baker's yeast). Eukaryota; Fingi; Ascomycota; Saccharomycetes; Saccharomycetales; Saccharomycetaceae; Saccharomyces. [1] SEQUENCE FROM N.A. MEDLINE; 96287653. NASS F Quence of 36.8 kb from the left arm of chromosome XIV reveals "The sequence of 36.8 kb from the left arm of chromosome XIV reveals which encodes a protein similar to the human myotonic dystrophy kinase."; Yeast 12:169-175(1996). EMBL; X92517; CAA33292.1; SEQUENCE 17 AA; 2139 MW; BD7E9AAFADF754AF CRC64;

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TKNA_HORSE
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INTERPRO;
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Hughes G.J., Frutiger S., Paquet N., Ravier F., Pasqu Sanchez J.-C., James R., Tissot J.-D., Bjellqvist B., Hochstrasser D.F.;
"Plasma protein map: an update by microsequencing.";
Electrophoresis 13:707-714(1992).
                            Equus caballus (Horse), and C
Eukaryota; Metazoa; Chordata;
                                               SUBSTANCE P.
TAC1 OR NKNA OR TAC2 OR NKA.
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01-APR-1993 (Rel. 25, Last sequence update)
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UNKNOWN PROTEIN FROM 2D-PAGE OF PLASMA (SPOT 11) (FRAGMENT).
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                    Mammalia;
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ERPRO; IPRO01128;
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onooxygenase; Electron transport;
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a; Craniata; Vertebrata;
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Studer R.O., Tr:
"Isolation and
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SPECIES=C.
                                                                                                                                                                                                     "Naturally occurring analogs of Lymantria testis ecdy: gonadotropin isolated from brains of Lymantria dispar Arch. Insect Biochem. Physiol. 36:37-50(1997).
-i-FUNCTION: STIMULATES SYNTHESIS OF ECDYSTEROID IN 7 OF LARVAE AND PUPAE.
SEQUENCE 13 AA; 1357 MW; 1841B4CA3275B764 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;
Noctuoidea; Lymantriidae; Lymantria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Primary amino acid sequence of guinea-pig substance P.";
Neuropeptides 14:105-110(1989).
-i- FUNCTION: TACHYKININS ARE ACTIVE PEPTIDES WHICH EXCITE NEURONS,
EVOKE BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND
SECRETAGOGUES, AND CONTRACT (DIRECTLY OR INDIRECTLY) MANY SMOOT
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Helv. Chim. Acta
[2]
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Loeb M.J., Wagner R.M., Woods C.W., Gelman D.G., Harrison
Bell R.A.;
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01-NOV-1995 (Rel. 32, 01-NOV-1995 (Rel. 32, 1
30-MAY-2000 (Rel. 39, 1
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Pseudophryne guentheri (Frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrach
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-SKIN;
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RESULT 11

TRN4_PSEGU STANU
ID TRN4_PSEGU STANU
AC P42989;
DT 01-NOV-1995 (Rel. 3;
DT 01-NOV-1995 (Rel. 3;
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DT 01-NOV-1995 (Rel. 3;
DT 30-MAY-2000 (Rel. 3;
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RN MEDLINE; 90287814.
RN SIMMACO M., Severin RN MEDLINE; 90287814.
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Best Local Similarity
Watches 3; Conserv
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P22779;
01-AUG-1991 (Rel. 19, Created)
01-AUG-1991 (Rel. 19, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
CYTOCHROME P450 2A (OLF2) (OLFACTIVE) (P52) (EC 1.14.14.1) (FRAGMENT).
                                                                                         Lazard D., Tal N., Rubinstein M., Khen M., Lancet D., Zupko K.;

"Identification and biochemical analysis of novel olfactory-specific
cytochrome p-4501A and UDP-glucuronosyl transferase.";

Biochemistry 29:7433-7440(1990).

-i- FUNCTION: CYTOCHROMES P450 ARE A GROUP OF HEME-THIOLATE

-i- FUNCTION: CYTOCHROMES P450 ARE A GROUP OF HEME-THIOLATE

MONOOXYGENASES. IN LIVER MICROSOMES, THIS ENZYME IS INVOLVED IN A
NADPH-DEPENDENT ELECTRON TRANSPORT PATHWAY. IT OXIDIZES A VARIETY

OF STRUCTURALLY UNRELATED COMPOUNDS, INCLUDING STEROIDS, FATTY
                                                                                                                                                                                                                                                                                                                                                                           Bos taurus (Bovine).
Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _BOVIN
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                                                                                                                                                                                                                                                                                                    MEDLINE;
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SIMILARITY: BELONGS
; E60409; E60409.
ACIDS, AND XENOBIOTICS.

CATALYTIC ACTIVITY: RH + REDUCED FLAVOPROTEIN + O(2) - OXIDIZED FLAVOPROTEIN + H(2)O.

SUBCELLULAR LOCATION: MEMBRANE-BOUND. ENDOPLASMIC RETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FUNCTION: TACHYKININS ARE ACTIVE PEPTIDES WHICH EXCITE NEURONS, EVOKE BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND SECRETAGOGUES, AND CONTRACT (DIRECTLY OR INDIRECTLY) MANY SMOOT
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32, Last sequence up
39, Last annotation
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01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
01-NOV-1995 (Rel. 32, Last annotation update)
HELOTHERMINE (FRAGMENT).
Heloderma horridum horridum (Mexican beaded lizard).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; J
Eukaryota; Metazoa; Chordata; Scleroglossa; Anguimorpha; H
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Mochca-Morales J., Martin B.M., Possani L.D.;

Tolation and characterization of helothermine, a novel temperature. Partial Pairon 28:299-309(1990).

Toxicon 28:299-309(1990).

Toxicon 28:299-309(1990).

Toxicon 28:299-309(1990).

Toxicon 28:299-309(1990).

Toxicon 28:299-309(1990).

MICHIEL IMBS AND LOWERING OF BODY TEMPERATURE, SUGGESTIL MICHIEL TOXICON TOXIN.
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Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneii oncorhynchus mykiss (Rainbow trout) (Salmo gairdneii Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eukaleostei; Euteleostei; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Actinopterygii; Salmoniformes; Salmonidae; Onco
                                                           "Substance-P-related and neurokinin-A-related peptides from the bra of the cod and trout.";
Eur. J. Blochem. 206:659-664(1992).
Eur. FUNCTION: TACHYKINING ARE ACTIVE PEPTIDES WHICH EXCITE NEURONS.
EVORE BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND SECRETAGOGUES, AND CONTRACT (DIRECTLY OR INDIRECTLY) MANY SMOOT
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01-DEC-1992
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Jensen J., Conlon J.M.;
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TISSUE=BRAIN;
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4; Conservative
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Best Local 9
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Best Local 9
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P41333;
01-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
MOD_RES 11 11 AMIDATION (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PIR; S23307; S23307.
PIR; S23308; S23308.
INTERPEO; IPR002040; ".
PROSITE; PS00267; TACHYKININ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scyliorhinus canicula (Spotted dogfish) Eukaryota; Metazoa; Chordata; Craniata; Elasmobranchii; Galeomorphii; Galeoidea;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 93292508.

MEDLINE; 93292508.

Waugh D., Wang Y., Hazon N., Balment R.J., Conlon J.M.;

Waugh D., Wang Y., Hazon N., Balment R.J., Conlon J.M.;

Waugh D., Wang Y., Hazon N., Balment R.J., Conlon J.M.;

Waugh D., Wang Y., Hazon N., Balment R.J., Conlon J.M.;

Peptimary structures and biological activities of substance-p-related peptides from the brain of the dogfish, Scyliorhinus canicula.";

EUR. J. Biochem. 214:469-474(1993).

-I- FUNCTION: TACHYKININS ARE ACTIVE PEPTIDES WHICH EXCITE NEURONS,

FUNCTION: TACHYKININS ARE ACTIVE POTENT VASODILATORS AND EVOKE BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND EVOKE BEHAVIORAL RESPONSES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-FEB-1995
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBSTANCE P.
                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00267; TACHYKININ; 1.
Tachykinin; Neuropeptide; Amidation; Neurotransmitter MOD_RES 1 1 1 AMIDATION.
SEQUENCE 11 AA; 1278 MW; 214860DEC9D6D867 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                     INTERPRO; IPR002040;
PROSITE; PS00267; TA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=BRAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scyliorhinidae;
                                                                             TKN1_PSEGU STANDARD; PRT; p42986; 01-NOV-1995 (Rel. 32, Created) 01-NOV-1995 (Rel. 32, Last sequence up 30-MAY-2000 (Rel. 39, Last annotation KASSININ-LIKE PEPTIDE K-I (PG-KI).
                              pseudophryne guentheri (Frog)
Eukaryota; Metazoa; Chordata;
Amphibia; Batrachia; Anura; Ne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N
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4; Conserv
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(Rel.
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                                     Anura; Neobatrachia;
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214860DEC9D6D1F7
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Pred. No. 3.1e+02
D; Mismatches
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                                                     Craniata;
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Vertebrata; Chondri
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Carcharhiniformes;
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                                                     Vertebrata; Euteleostomi;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FAMILY
                                      Bufonoidea;
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                                      Myobatrachidae;
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Best Local S
Matches 3
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Best Local
                                                                                                                                      Matches
TKNA_GADMO P28498;
                                                                                                                                                                                                                                                                                                   Conlon J.M., Katsoulis S., Schmidt W.E., Thim L.;

"[Arg] substance P and neurokinin A from chicken small intestine.";

Regul. Pept. 20:171-180(1988).

-i- FUNCTION: TACHYKININS ARE ACTIVE PEPTIDES WHICH EXCITE NEURONS,

EVOKE BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND

SECRETAGOGUES, AND CONTRACT (DIRECTLY OR INDIRECTLY) MANY SMOOTH
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01-FEB-1991 (Rel. 17, Last seq
30-MAY-2000 (Rel. 39, Last ann
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; (
Archosauria; Aves; Neognathae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMP. BLOCHEM. Physiol. 118B:367-374(1997).

11- FUNCTION: SERUM ALBUMIN, THE MAIN PROTEIN OF PLASMA, HAS BINDING CAPACITY FOR WATER, CA++, NA+, K+, FATTY ACIDS, H BILIRUBIN AND DRUGS. ITS MAIN FUNCTION IS THE REGULATION COLLOIDAL OSMOTIC PRESSURE OF BLOOD.

1- SUBCELLULAR LOCATION: EXTRACELLULAR.

1- TISSUE SPECIFICITY: PLASMA.

1- MISCELLANEOUS: IN THE RED-EARED SLIDER TURTLE, THERE ARE OF ALBUMIN, ALB-1 AND ALB-2.

1- SIMILARITY: BELONGS TO THE ALB/AFP/VDB FAMILY.
                                                                                                                                                                                                    Tachykinin; Neuropeptide; Amidation; Neurotransmitter MOD_RES 11 11 AMIDATION. SEQUENCE 11 AA; 1377 MW; 21487FE3C9D6C6C7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-INTESTINE;
MEDLINE; 88204263.
                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Purification and partial amino acid sequences of two distinct albumins from turtle plasma";
                                                                                                                                                                                                                                        INTERPRO; IPRO02040; -. PROSITE; PS00267; TACHYKININ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INTERPRO; IPRO00264;
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3; Conserv
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                       STANDARD;
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Weognathae; Galliformes; Phasianidae; Phasianinae;
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Last annotation update)
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                                                                                                                                                                                                                                                                              THE TACHYKININ FAMILY
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Pred. No. 2.1e
0; Mismatches
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                     PRT;
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1.9e+02;
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RESULT 5
GALS_SALTY
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Best Local Similarity
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Ol-DEC-1992 (Rel. 24, La
30-MAY-2000 (Rel. 39, La
SUBSTANCE P
Gadus morhua (Atlantic c
                                                                                                                                                                                                                                                                                                                                                     GALS_SALTY
P41030;
01-FEB-1995
01-FEB-1995
01-FEB-1995
                                                                                           Benner-Luger D., Boos W.;

Benner-Luger D., Boos W.;

The mglB sequence of Salmonella typhimurium LT2; promoter analysis by gene fusions and evidence for a divergently oriented gene coding for the mgl repressor.";

Mol. Gen. Genet. 214:579-587(1988).

-!- FUNCTION: REPRESSOR OF THE MGL OPERON. BINDS GALACTOSE AND D-FUCOSE AS INDUCERS. GALS BINDS TO AN OPERATOR DNA SEQUENCE WITHIN ITS OWN CODING SEQUENCE (BY SIMILARITY).

-!- SIMILARITY: BELONGS TO THE LACI FAMILY OF TRANSCRIPTIONAL
              Transcription regulation; NON_TER 1 1
                                                                                                                                                                                                                                                                                   Bacteria; F
Salmonella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Substance-P-related and neurokinin-A-related peptides from the brain of the cod and trout.";
Eur. J. Blochem. 206:659-664(1992).
                                                                    STYGENE; SG10521;
                                                                                                                                                                                                                                      STRAIN-LT2
                                                                                                                                                                                                                                                        SEQUENCE FROM
                                                                                                                                                                                                                                                                                                               Salmonella typhimurium
                                                                                                                                                                                                                                                                                                                                           MGL REPRESSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
MOD_RES 11 11 AMIDATION (BY SIMILARITY).
SEQUENCE 11 AA; 1315 MW; 214860D759D6C6C7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EUR. J. Blochem. 206:659-664(1992).
-i- FUNCTION: TACHYKININS ARE ACTIVE PEPTIDES WHICH EXCITE NEURONS,
EVOKE BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND
SECRETAGOGUES, AND CONTRACT (DIRECTLY OR INDIRECTLY) MANY SMOOTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE.
TISSUE=BRAIN;
MEDLINE; 92298992.
Jensen J., Conlon J.M.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Actinopterygii; Neopterygii; Teleostei; Acanthomorpha; Paracanthopterygii; Gadif
                                          PROSITE;
                                                                                                                                                                                                                            MEDLINE; 89112167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INTERPRO; IPR002040; -.
PROSITE; PS00267; TACHYKININ; 1.
                                                      INTERPRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 PRPQQ 6
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                                                                                 REGULATORS
                       ps00356; HTH_LACI_FAMILY; PARTetion regulation; DNA-binding;
                                                      IPR000843;
                                                                                                                                                                                                                                                                                                Proteobacteria;
18
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Rel. 31, Last sequence update)
Rel. 31, Last annotation update)
AND GALACTOSE ULTRAINDUCTION FACTOR (FRAGMENT).
AA;
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MW;
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Pred.
74A77150FA49FB8B CRC64;
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No.
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stei; Euteleostei; Neoteleostei;
Gadiformes; Gadoidei; Gadidae;
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Query Match

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Maximum Match 100%
Listing first 45 s
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Maximum DB
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 protein search, using sw model
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length:
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1 VMVKFLEPRPDQQH
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  SwissProt_39:*
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Copyright (c) 1993 - 2000 Compugen Ltd
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ALB2_TRASC
TKNA_CHICK
TKNA_GADMO
GALS_SALTY
HELT_HELHO
TKNA_ONCMY
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TKNA_SCYCA
TKN1_PSEGU
TKN2_PSEGU
TKN3_PALPR
MK3_PALPR
MK3
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9 trachemys s
10 gailus gail
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RASC B1189; 5-JUL-1998 (Rel. 36, Creat.) 5-JUL-1998 (Rel. 36, Last.) 5-JUL-1999 (Rel. 38, Last.) 18 KDA SERUM ALBUMIN (ALB-2) 18 KDA SERUM ALBUMIN (ALB-2) 19 KRATYOTA; Metazoa; Chordat (Pestudines; Cryptodira; Tes (Pestudines; Cryptodira; Tes (Pestudines; Chyptodira; C	y Match 25.2%; Local Similarity 80.0%; hes 4; Conservative 8 PRPDQ 12 1: 3 PKPDQ 7	Ol-AUG-1988 (Rel. 08, Created) Ol-AUG-1988 (Rel. 08, Last seque 30 MAY-2000 (Rel. 39, Last annot HYLAMBATES KASSININ (GLU(2)-PRO) Kassina maculata (Affican rhacop Eukaryota; Metazoa; Chordata; Ol Amphibia; Batrachia; Anura; Neol Kassina. [1] SEQUENCE. Yasuhara T., Nakajima T., Erspan "New tachykinins, Glu2, Pro5-ka; hylambatin, in the skin of the imaculatus."; Biomed. Res. 2:613-617(1981)!- FUNCTION: TACHYKININS ARE AN EVOKE BEHAVIORAL RESPONSES, SECRETAGOGUES, AND CONTRACT MUSCLES!- SIMILARITY: BELONGS TO THE PIR; S10059; S10059. INTERPRO; IPRO02040; PROSITE; PS00267; TACHYKININ; 1 TACHYKININ; Neuropeptide; Amida MOD_RES 12 AA; 1376 MW; 3E	T 1 KASMA STANDARD; DOGGI3:	19 17.8 12 1 19 17.8 13 1 Y. 19 17.8 13 1 Y. 19 17.8 15 1 M. 19 17.8 16 1 M. 19 17.8 17.8 17.8 17.1 X. 19 17.8 17.1 X. 19 17.8 17.1 X. 19 17.8 20 1 A. 19 17.8
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ferredoxin b - Japanese radish (fragments)
C:Species: Kaiware daikon (Japanese radish)
C;Date: 10-Mar-1998 #sequence_revision 10-Mar-1998 #text_change 17-Apr-1998
C;Accession: $69166
R:Obata, S.; Nishimura, M.; Nagai, K.; Sakihama, N.; Shin, M.
Arch. Blochem. Blophys. 316, 797-802, 1995
A;Title: Four ferredoxins from Japanese radish leaves.
A;Reference number: $69164; MUID:95168867
A;Rolecule type: protein
A;Residues: 1-19 <OBA>
C;Keywords: 2Fe-2S; electron transfer; iron-sulfur protein
                                                                                                                               S
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submitted to JIPID, February 1994
A;Description: Phylogenetic diversity in the genus Bacillus and comparative ribosomal A;Reference number: JP0042
A;Accession: JP0055
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JP0055
Search completed: December 21, 2000, 08:30:06 Job time: 270 sec
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A; Residues: 1-20 <OCH>
C; Keywords: protein biosynthesis; ribosome
                                                                                                                                                                                                                                                                                                                                                                                                                          ribosomal protein L30 - Bacillus polymyxa (fragment)
C;Species: Bacillus polymyxa
C;Date: 10-Mar-1994 #sequence_revision 28-Oct-1994 #text_change 28-Oct-1994
C;Accession: JP0055
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Best Local Similarity 35.7
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Best Local Similarity 28.6%;
Matches 4; Conservative
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Best Local Similarity 71.4
Matches 5; Conservative
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5 VKFITPETHKEEDM 18
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Pred. No. 7.6e+02;
1; Mismatches 1
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Pred. No. 7.6e+02;
4; Mismatches 6; Indels
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A; Residues: 1-11 <JEN>
A; Experimental source: brain
C; Function:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R:Lehner, P.J.
submitted to the EMBL Data Library, August 1994
A;Description: Human HLA-A0201 restricted recognition of
A;Reference number: $47355
A;Accession: $47395
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    T-cell antigen receptor VJ junction beta chain - human C;Species: Homo sapiens (man) C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 05-Nov-1999 C;Accession: S47395
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N;Alternate names: CIP-1; coeliac immunoreactive protein 1
C;Species: Avena sativa (oat)
C;Date: 19-Mar-1997 #sequence_revision 24-Jul-1998 #text_change 24-Jul-1998
C;Accession: S29207
R;Rocher, A;-Colilla, F; Ortiz, M.L.; Mendez, E.
FEBS Lett. 310, 37-40, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Keywords: T-cell receptor
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A; Residues: 1-12 <LEH>
                                                                                                                                                                                  A; Experimental source: endosperm C; Superfamily: gliadin C; Keywords: prolamin; seed
                                                                                                                                                                                                                                                                                     FEBS Lett. 310, 37-40, 1992
A; Title: Identification of the three major A; Reference number: S29207; MUID:92405739
A; Accession: S29207
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  PYPEQQ 12
                                       PRPDQQ 13
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Pred. No. 4.2e+02;
0; Mismatches 1
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Pred. No. 4.6e+02;
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5.9e+02;
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                                                                                                     globin - polychaete (Eudistylia vancouveri) (fragment)
C:Species: Eudistylia vancouveri
C:Species: Eudistylia vancouveri
C:Species: Eudistylia vancouveri
C:Apate: 19-Mar-1997 #sequence_revision 10-Oct-1997 #text_change 05-Dec-1998
C:Accession: S19613
R:Qabar, A.N.; Stern, M.S.; Walz, D.A.; Chiu, J.T.; Timkovich, R.; Wall, J.S.;
J. Mol. Biol. 222, 1109-1129, 1991
A;Title: Hierarchy of globin complexes. The quaternary structure of the extrace A; Reference number: S19532; MUID:92106333
A;Accession: S19613
                                                                                                                                                                                                                                                                                                    RESULT
S19613
      A; Experimental source: plume C; Complex: dodecamers, each consisting of a trimer of tetramers of globin chains; C; Keywords: calcium; dodecamer; heme; homotetramer; oxygen carrier
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A; Molecule type: protein A; Residues: 1-19 < QAB>

of the extracellular

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ribulose-bisphosphate carboxylase (EC 4.1.1.39) large chain C;Species: Spinacia oleracea (spinach) C;Date: 22-Dec-1988 #sequence_revision 22-Dec-1988 #text_chang C;Accession: A28965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Status: preliminary
A;Molecule type: protein
A;Mesidues: 1-15 <MUL>
C;Keywords: carbon-carbon lyase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Mulligan, R.M.; Houtz, R.L.; Tolbert, N.E. proc. Natl. Acad. Sci. U.S.A. 85, 1513-1517, 1988 A;Title: Reaction-intermediate analogue binding b;
                                                                                                                                                                                                                                                                      R:Wang, Y.; Bell, A.W.; Hermodson, M.A.; Roach, P.J. J. Biol. Chem. 261, 16909-16915, 1986 A;Title: Liver isozyme of rabbit glycogen synthase. Amino acid A:Reference number: A92570; MUID:87057401 A:Accession: B25348
                                                                                                                                                                                                                                                                                                                                                                     UDPglucose--glycogen glucosyltransferase (EC 2.4.1.11) P-2 peptide - N;Alternate names: UDPglucose-glycogen glucosyltransferase C;Species: oryctolagus cuniculus (domestic rabbit) C;Date: 30-Jun-1988 #sequence_revision 30-Jun-1988 #text_change 06-De C;Accession: B25348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Reference number: A28965; A; Accession: A28965
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                                                                                                                                                                      A; Description: catalyzes the alpha-1, 4-glucosylation of glycogen by UDPglucose produc C; Keywords: glycogen/starch biosynthesis; glycosyltransferase; hexosyltransferase
                                                                                                                                                                                                                                  A; Molecule type: protein A; Residues: 1-17 <WAN>
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1 MYPRP 5
                                   6 LFPRP 10
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                                                                            Conservative
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                                                                                               22.4%;
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0; Mismatches
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                                                                                                 Score 24; DB 2;
Pred. No. 6.7e+02
                                                                                   Mismatches
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                                                                                                                    Length 17;
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J. Immunol. 142, 1621-1625, 1989
A;Title: A novel heteromorphic human cell surface alloantigen, A;Reference number: A60770; MUID:89140352
A;Accession: A60770
A;Molecula : Molecula : Molec
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C:Date: 06-Oct-1994 #sequence_revision 18-Nov-1994 #text_change 12-Apr-1995
C:Accession: A54083
R:Kaslan, E: Heyer, W.D.
J. Biol. Chem. 269, 14103-14110, 1994
A:Title: Schizosaccharomyces pombe fatty acid synthase mediates DNA strand e. A;Reference number: A54083; MUID:94245730
A:Accession: A54083
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-20 <a href="https://www.change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-change-ch
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Blochem. Blophys. Res. Commun. 178, 526-530, 1991
A:Tille: Primary structures of the bombesin-like neuropeptides in A;Reference number: PQ0177; MUID:91315477
A;Accession: PS0221
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A;Residues: 1-14 <SCH>
C;Comment: This protein is an alloantigen in human populations but is not found
C;Comment: This protein exists in both membrane bound and cytosolic forms.
C;Keywords: glycoprotein; polymorphism; surface antigen
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C:Species: Homo sapiens (man)
C:Date: 14-May-1993 #sequence_revision 14-May-1993 #text_change
                                                                                                  A; Experimental source: b: C; Keywords: neuropeptide
                                                                                                                                                                                   A; Molecule type: protein A; Residues: 1-15 < CON>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gastrin-releasing peptide - laughing frog (fragment)
C;Species: Rana ridibunda (laughing frog)
C;Date: 23-Nov-1991 #sequence_revision 23-Nov-1991 #text_change
C;Accession: PS0221
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Best Local S
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Best Local Similarity 36.4
Matches 4; Conservative
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4; Conserv
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Pred. No.
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Pred.
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3.7e+02;
0;
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A; Molecule type: protein
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Best Local Similarity
Matches 4; Conser
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alpha-macroglobulin - green seaturtle (fragment)
C. Species: Chelonia mydas (green seaturtle)
C.Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #t.
C.Accession: A41436
R.Osada, T.; Sasaki, T.; Ikai, A.
J. Biochem. 103, 212-217, 1988
A.Title: Purification and characterization of alpha-ma; Reference number: A41436; MUID:88227890
A.Accession: A41436
A.Status: preliminary
A.Holecule type: protein
A; Residues: 1-15 <OSA>
R:Jensen, J.; Conlon, J.M.
Eur. J. Blochem. 206, 659-664, 1992
A:Title: Substance-P-related and new A:Reference number: S23186; MUID:92:
A:Accession: S23306
                                                                     substance P - Atlantic cod
C:SpecLes: Gadus morhua (Atlantic cod)
C:Date: 19-Mar-1997 #sequence_revision
C:Accession: S23306
R:Jensen, J.; Conlon, J.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Regul. Pept. 20, 171-180, 1988
A;Title: [Arg3]substance P and neurokinin A from chicken small intestine A;Reference number: JN0023; MUID:88204263
A;Accession: JN0023
A;Molecule type: protein
A;Residues: 1-11 <CON>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  substance P - chicken
C;Species: Gallus gallus (chicken)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 11-Jul-1997
C;Accession: JN0023
R;Conlon, J.M.; Katsoulis, S.; Schmidt, W.E.; Thim, L.
                                                                                                                                                                                                                                                                                                                                                                                                               C;Superfamily: substance P precursor C;Keywords: amidated carboxyl end; tachykinin F;11/Modified site: amidated carboxyl end (Me
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Best Local Similarity
Tatches 4; Conserve
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                 d and neurokinin-A-related MUID:92298992
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Pred. No. 4.2e
0; Mismatches
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Pred. No. 4e+0
1; Mismatches
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Pred. No.
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4e+02;
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4e+02;
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Maximum Match
Listing first
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                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                 Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                    on:
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                                                        seq
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protein search, using sw model
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Match
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107
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Gapop 10.0 , Gapext 0.5
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GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
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S19296
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S33300
S23308
A60551
A47105
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S19613
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11.273 Million cell updates/sec
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                                                                                                                           gastrin-releasing
alpha-macroglobuli
substance p - chic
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avenin gamma-4 - o
ribulose-bisphosph
          dystroglycan - chi
hypothetical L2 pr
kassinin-like pept
kassinin-like pept
substance P-like p
amylopullulanase -
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exotoxin A - Strep
16K protein - poul
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p190/210, fatty ac
cell surface alloa
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globin - polychaet
ferredoxin b - Jap
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                                                        probable substance substance P - rain
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2 MVKFLFPRPDQQHS 15 7 LVRSLIGRPEXQRT

20

Matches Query Match Best Local (

Similarity 5; Conserv

Conservative

4.

Mismatches

0;

Gaps

0;

25.2%; 35.7%;

Score 27; pred. No.

DB 2; Le.. . 2.5e+02; . 5;

Length 20; Indels

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A; Molecule type: protein
A; Residues: 1-20 <OCH>
C; Keywords: protein biosynthesis;

ribosome

and comparative ribosomal

RESULT 2 JP0053 ribosomal protein L30 - Bacillus macerans (fragment) C;Species: Bacillus macerans C;Date: 10-Mar-1994 #sequence_revision 28-Oct-1994 #te C;Accession: JP0053 R;Ochi, K. submitted to JIPID, February 1994 A;Description: Phylogenetic diversity in the genus Bac A;Reference number: JP0042 A;Accession: JP0053 A;Molecule type: protein	Query Match 25.2%; Score 27; DB 2; Le Best Local Similarity 80.0%; Pred. No. 1.4e+02; Matches 4; Conservative 1; Mismatches 0; Qy 8 PRPDQ 12 : Db 3 PKPDQ 7	RESULT 1 \$10059 slo059 slo059 N;Alternate names: hylambates-kassina maculata) N;Alternate names: hylambates-kassinin C;Species: Kassina maculata C;Species: Kassina maculata C;Accession: \$1059 C;Accession: \$1059 R;Yasuhara, T.; Nakajima, T.; Erspamer, G.F.; Erspamer, V. Blomed. Res. 2, 613-617, 1981 Blomed. Res. 2, 613-617, 1981 A;Ritle: New tachykinins, Glu2, Pro5-kassinin (hylambates-k A;Reference number: \$07436 A;Reference number: \$07436 A;Accession: \$10059 A;Residues: 1-12 <yas> A;Experimental source: skin A;Residues: 1-12 <yas> A;Experimental source: skin A;Note: the source is designated as Hylambates maculatus C;Keywords: amidated carboxyl end; neuropeptide; tachykinin C;Keywords: amidated carboxyl end (Met) #status pre</yas></yas>	ALIGNMENTS	30 22 20.6 18 2 JA2016 31 22 20.6 19 2 JP0054 32 21 19.6 9 4 S15594 33 21 19.6 11 1 SPHO 33 21 19.6 11 1 SPHO 34 21 19.6 11 2 S47391 35 21 19.6 15 2 S26515 36 21 19.6 15 2 S26515 37 21 19.6 17 2 S05033 40 21 19.6 17 2 S05033 40 21 19.6 18 2 S55002 41 21 19.6 20 2 S18582 42 21 19.6 20 2 S18582 42 21 19.6 20 2 S16646 43 20 18.7 10 2 A61007
) #text_change 28-Oct-1994 Bacillus and comparative ribosom	Length 12: ; Indels 0; Gaps 0;	ta) 1997 #text_change 24-Mar-1999 Erspamer, V. (hylambates-kassinin) and hylambatin, maculatus le; tachykinin ly #status predicted		mammary-derived gr ribosomal protein orf 1 rara 5'-regi substance P - hors substance P - guin T-cell antigen rec T-cell receptor al T cell receptor be DNA-directed RNA p photosystem II pro protein 1 - Legion hypothetical prote urinary tract ston cardioacceleratory angiotensin-conver hementin (EC 3.4

Page 8

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; TELEFAX: (206) 682-6031
; TELEX: 3723836
; INFORMATION FOR SED ID NO: 73:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
TYPE: amino acid
15-08-432-871C-73
                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: AISENBERG, Irwin M.
REGISTRATION NUMBER: 19,007
REFERENCE/DOCKET NUMBER: SG19171
TELECOMMUNICATION INFORMATION:
TELEFAX: 202-872-0493
TELEFAX: 202-872-0493
TELEFAX: 440 069 AIS UI
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: TOPOLOGY: linear
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US-07-678-974D-8
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Search completed: December 21, 2000, 08:31:49 Job time: 372 sec
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Best Local Similarity 42.9%;
Matches 6; Conservative
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STATE: D.C.

STATE: D.C.

COUNTRY: U.S.A.

ZIP: 20036-3186

ZIP: 20036-3186

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/678,974D

FILING DATE: 25-JUN-1991

CLASSIFICATION: 435

ATTPCAREY ACTOR TENCHMATTON:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8, Application US/07678974D Patent No. 5629146
                                                                                                                                                                       Query Match 24.8%;
Best Local Similarity 44.4%;
Matches 8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 FIFDR----HPIAY 10
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Pred. No. 1.1e+02;
2; Mismatches 2
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pred. No. 1.8e+02;
0; Mismatches 5;
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Thes 5; Conserv
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PCT-US95-04018-69
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                                                                                                                                                                                                                                                       Sequence 69, Application PC/TUS9504018 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 7, Application US/08221580 Patent No. 5519000 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: DeLuca, Wark
REGISTRATION NUMBER: 33,229
REFERENCE/DOCKET NUMBER: CCOR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215,568-3100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 7:
                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDLIUM TYPE: Floppy disk
COMPUTER: IBM FOR COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                  TITLE OF INVENTION: Tumor Necrosis Factor Inhibitors NUMBER OF SEQUENCES: 76
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: TU NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                          APPLICANT:
COMPUTER READABLE FORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Mervic, Miljenko
APPLICANT: Weber, Robert W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Heavner, George A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: P
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 215-568-3439
                                                                 STREET: One Liberty Place 46th Floor CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                 12 QQHSVAYTF 20
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                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
                                                                                                ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & ADDRESSEE: Norris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
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T: One Liberty Place 46th Floor
Philadelphia
                  19403
                                  Pennsylvania
: USA
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Weber, Robert W.
                                                                                                                                                                                                                        Kruszynski, Marian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         United States of America
                                                                                                                                                                                                                                          Heavner, George A.
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55.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 27;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 13:
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Query Match
Best Local Similarity
"atches 5; Conserve
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US-08-432-871C-73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 73, Application US/08432871C Patent No. 5877010
                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Loeb, Lawrence A.
APPLICANT: Black, Margaret E.
APPLICANT: Black, Margaret E.
TITLE OF INVENTION: THYMIDINE KINASE MUTANTS
NUMBER OF SEQUENCES: 104
FILING DATE: 02-MAY-1995
CLASSIFICATION: 514
ATTORNEY,AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE,DOCKET NUMBER: 2400
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (215) 568-343
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                 STREET: 6300
STREET: Beattle
STATE: Washington
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 08/221,583
FILING DATE: 01-APR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/221,581
FILING DATE: 01-APR-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/221,580
FILING DATE: 01-APR-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: a
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REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WordPerfect 5.1
                                                                                                            APPLICATION NUMBER: US/08/432,871C FILING DATE: 02-MAY-1995
                                                                                                                                                                                                                                                               COUNTRY: US
ZIP: 98104-7092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US95/04018 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE:
COMPUTER: IE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: DeLuca, Mark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 QSHSWPFTF 13
                                                                                                                                                                                                                                                                                                                                   E: Seed and Berry LLP 6300 Columbia Center,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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55.6%;
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                   240052.409C1

    Mismatches

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Pred. No. 90;
                                                                                                                                                                                                                                                                                                                                     701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 13;
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; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-974-775-11
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Best Local Similarity 45.5%;
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 312-321-4299
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                         APPLICATION NUMBER: US/08/974,775
APPLICATION UMBER: US/08/974,775
EILING DATE: 20 NOV-1997
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: MAILLN, Alice O.
RECISTRATION UMBER: 35,601
REFERENCE/DOCKET NUMBER: 7814/27
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/974,775
FILING DATE: 20-NOV-1997
CLASSIFICATION: 436
                                                                                           TELEPHONE: 312-321-4200
TELEFAX: 312-321-4299
INFORMATION FOR SEQ ID NO: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-321-4200
TELEFAX: 312-321-4299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Toback, F. Gary
APPLICANT: Walsh-Reitz, Margaret
APPLICANT: Walsh-Reitz, Margaret
TITLE OF INVENTION: GROWTH-PROMOTING PROTEINS AND PEPTIDES
TITLE OF INVENTION: FOR KIDNEY EPITHELIAL CELLS
NUMBER OF SEQUENCES: 49
CORRESPONDENCE ADDRESS:
CORRESPONDENCE BOTHER HOFER, GILSON & LIONE
                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 35,601 REFERENCE/DOCKET NUMBER: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Martin, Alice O. REGISTRATION NUMBER: 3
                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: BRINKS, HOFER, GILSON & LIONE STREET: NBC Tower - Suite 3600, 455 N. Cityfront STREET: Plaza Drive
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Chicago
STATE: Illinoi
                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                   STRANDEDNESS:
                                                        ENGTH:
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                                     amino acid
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                                                        14 amino acids
linear
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Pred. No.
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. 44;
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7 FPRPDQQH 14 | ||::| 1 FTTPDKKH 8

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; MOLECULE TYPE: peptide US-08-974-775-39
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US-08-159-339A-558
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                                                                              ; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-159-339A-558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 26.2%;
Best Local Similarity 36.4%;
Matches 4; Conservative
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APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
Matches
              Query Match
Best Local Similarity
                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/926,666
APPLICATION NUMBER: US 08/027,746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEPAX: //15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Sette, Alessandro APPLICANT: Celis, Esteban
                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
ATTORNBY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/159,339A FILING DATE: 29-NOV-1993 CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 PYPEGNHEASY 13
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                                                                                                                                                                                                                                        TELEFAX:
                                                                                                                                                                    LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    San Francisco
                                                                                                                                                    : 10 amino acids amino acid
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                                                                                                                                                                                                                                        (415) 576-0300
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IBM Compatible
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                 25.2%;
50.0%;
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Pred. No.
 Score 27; DB Pred. No. 67; 2; Mismatches
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66;
                   DB 3;
67;
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                                       Length 10;
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       Indels
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RESULT

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APPLICANT: HOWARD L. Weiner
APPLICANT: DAVID A. Hafler
TITLE OF INVENTION: PEPTIDES DERIVED FROM IMMUNODOMINANT
TITLE OF INVENTION: EPITOPES OF MYELIN BASIC PROTEIN
FILE REFERENCE: 1010/05723US3
CURRENT APPLICATION NUMBER: US/08/297,395A
CURRENT FILING DATE: 1994-08-11
EARLIER APPLICATION NUMBER: 08/059,189
EARLIER FILING DATE: 1993-05-06
EARLIER APPLICATION NUMBER: 07/502,559
EARLIER APPLICATION NUMBER: DCT/US88/02139
EARLIER APPLICATION NUMBER: DCT/US88/02139
EARLIER APPLICATION NUMBER: DCT/US88/02139
EARLIER APPLICATION NUMBER: 07/065,734
EARLIER FILING DATE: 1988-06-24
EARLIER FILING DATE: 1987-06-24
EARLIER FILING DATE: 1987-06-24
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                                                                                                                                                                         ; TYPE: PRT ; ORGANISM: Homo sapiens US-08-297-395-14
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US-08-297-395-14
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                                                                      Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 14
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 14, Application US/08297395A Patent No. 6039947
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Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (415) 494-8771
TELEX: 910 277299 FHT US
INFORMATION FOR SEO 1D NO. 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Sherwood, Pamela J.
REGISTRATION NUMBER: 36,677
REFERENCE/DOCKET NUMBER: A-(
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE:
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5 RPSQRHGSKY 14
                                     RPDQQHSVAY 18
                                                                            Conservative
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                                                                                            28.0%;
50.0%;
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                                                                          ; Score 30; DB; Pred. No. 44; 1; Mismatches
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Pred. No.
                                                                                              DB 3;
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                                                                                                                 Length 20;
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Best Local Similarity
5; Conserv
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US-08-974-775-11
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                                                                                                                                                                                                                                                                                                                                 Sequence 11, Application US/08974775 Patent No. 6096706
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 312-321-4299
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/974,775
FILING DATE: 20-NOV-1997
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Martin, Alice O.
NAME: Martin, Alice O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Toback, F. Gary
APPLICANT: Walsh-Reitz, Margaret
TITLE OF INVENTION: GROWTH-PROMOTING PROTEINS AND PEPTIDES
TITLE OF INVENTION: FOR KIDNEY EPITHELIAL CELLS
NUMBER OF SEQUENCES: 49
CORRESPONDENCE ADDRESS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                               NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                         APPLICANT: Toback, F. Gary
APPLICANT: Walsh-Reitz, Margaret
TITLE OF INVENTION: GROWTH-PROMOTING PROTEINS AND PEPTIDES
TITLE OF INVENTION: FOR KIDNEY EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 35,601
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-321-4200
TELEFAX: 312-321-4299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                  ADDRESSEE: BRINKS, HOFER, GILSON & LIONE STREET: NBC Tower - Suite 3600, 455 N. Cityfront STREET: Plaza Drive CITY: Chicago STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: BRINKS, HOFER, GILSON & LIONE STREET: NBC Tower - Suite 3600, 455 N. Cityfront STREET: Plaza Drive CITY: Chicago STATE: Illinois
                                           COUNTRY: USA
ZIP: 60611-5599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 60611-5599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS
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45.5%;
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Pred. No.
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; NAME/KEY: Peptide
; LOCATION: 1..14
; OTHER INFORMATION:
; OTHER INFORMATION:
US-08-483-021-3
; Sequence 1, Application US/08468540B
                  RESULT 5
US-08-468-540B-1
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                                                                                                                                                                   Query Match
Best Local !
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ZIP: 94105-1492
COMPUTER READABLE FORM:
YOUTUM TYPE: Floppy d'
                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (415) 543-9600
TELEFAX: (415) 543-5043
INFORMATION FOR SEO ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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APPLICATION NUMBER: US 0.
FILING DATE: 19-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/978,946
FILING DATE: 18-NOV-1992
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PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US 08/397,533
FILING DATE: 02-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/208,072
FILING DATE: 03-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 07/635,840 FILING DATE: 12-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/210,594 FILING DATE: 23-JUN-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
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                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: Modified-site
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                                                                                                                                                                 Local
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                                                                                                                 RPDQQHSVAY 18
                                                                                    RPSORHGSKY 14
                                                                                                                                                  Similarity 50.05; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                 amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                    linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UMBER: US 07/367,751
21-JUN-1989
                                                                                                                                                                     28.0%;
50.0%;
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                                                                                                                                                                                                                                                 /note= "rat myelin basic protein
peptide analog of MBP(1-14)4-A"
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                                                                                                                                                                                                                                                                                                                                 /product= "Xaa = N-acetyl alanine"
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                                                                                                                                                                   Score 30;
Pred. No.
                                                                                                                                                         Mismatches
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29;
                                                                                                                                                                                    1;
                                                                                                                                                                                      Length 14;
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GENERAL INFORMATION:
APPLICANT: Weiner
                                                                                                                                                                                                      Sequence 5, Application US/08606639A Patent No. 5939400
                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 50.0
Matches 5; Conservative
                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: SUPPRESSION OF T-CELL PROLIFERATION
TITLE OF INVENTION: USING PEPTIDE FRAGMENTS OF MYELIN BASIC PROTEIN
NUMBER OF SEQUENCES: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
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MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby P.C.
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CLASSIFICATION: 514
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                   NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                                                                TITLE OF INVENTION:
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CITY: N
COMPUTER READABLE FORM:
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REGISTRATION NUMBER:
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                       COUNTRY:
                                                         CITY: San Francisco
                                                                    STREET:
                                                                                     ADDRESSEE:
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              94111-4187
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amino acid
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                                          California
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Miller, Ariel
Al-Sabbagh, Ahmad
                                                                      BE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
4 Embarcadero Center, Suite 3400
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                               USA
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Pred. No.
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; MOLECULE TYPE:
; FRAGMENT TYPE:
US-08-440-861-11
                                                                                                    US-08-159-339A-1076
                                                                                                                       RESULT
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                                         Sequence 1076, Application US/08159339A Patent No. 6037135 GENERAL INFORMATION:
                                                                                                                                                                                                                                                   Query Match 29.0%;
Best Local Similarity 46.2%;
Matches 6; Conservative
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Best Local Similarity 50.0
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/106,016
FILING DATE: 31-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Amy E. Mandragouras
REGISTRATION NUMBER: 35,207
REFERENCE/DOCKET NUMBER: 1PC-075 (IMI-040cp)
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Griffith, Irwin J.
APPLICANT: Kuo, Mei-Chang
APPLICANT: Lugman, Mohammad
TITLE OF INVENTION: T CELL EPITOPES OF RYEGRASS POLLEN
TITLE OF INVENTION: ALLERGEN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: N
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/440,861 FILING DATE: 15-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 60 SI
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CGY: linear
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                         Ralph T.
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Pred. No.
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Pred. No.
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US-08-483-021-3
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Best Local Similarity 50.0
Trackes 5; Conservative
                                                                                                                                                                                                                                             Sequence 3, Application US/08483021 Patent No. 5734023 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
TELEFAX: (415) 576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29-NOV-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-NUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 1076: SEQUENCE CHARACTERISTICS: LENGTH: 10 amino acids
STREET: One Mar...
CITY: San Francisco
CTATE: California
                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew
STREET: One Market Plaza, Steuart Street Tower
                                                                                                                                                                  APPLICANT: Nag, Bishwajit
APPLICANT: Clark, Brian R.
APPLICANT: Sharma, Somesh
APPLICANT: McConnell, Harden
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 1254

CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT.
TITLE OF INVENTION: HLA BITITLE OF INVENTION: Uses
TITLE OF GROHENCES: 1254
                                                                                                                             TITLE OF INVENTION: MHC Subunit Conjugates Useful in TITLE OF INVENTION: Ameliorating Deleterious Immune Responses
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MOLECULE TYPE:
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                                                                                                               NUMBER OF SEQUENCES:
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CITY: San Francisco
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Total number of hits satisfying chosen parameters:
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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Copyright (c) 1993 - 2000 Compugen Ltd.
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US-08-159-339A-935
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Patent No. 60
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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatibl
                                                                                                                  INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
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APPLICANT: Grey, Howard M.
APPLICANT: Sette, Alessandro
APPLICANT: Celis, Esteban
TITLE OF INVENTION: HLA Binding peptides and Their
TITLE OF INVENTION: Uses
                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 07/926,666
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                              FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REGISTRATION NUMBER: 32,762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                          REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 016
TELECOMMUNICATION INFORMATION:
TELECHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/OU FILING DATE: 29-NOV-1993 CLASSIFICATION: 424
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STREET: Two Embarcadero Center, Eighth Floor
                                                          LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
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US-08-951-871-10
US-08-482-142-80
US-08-613-235-6
US-08-613-235-6
US-08-107-676-21
5425936-4
5433940-1
US-08-022-381A-12
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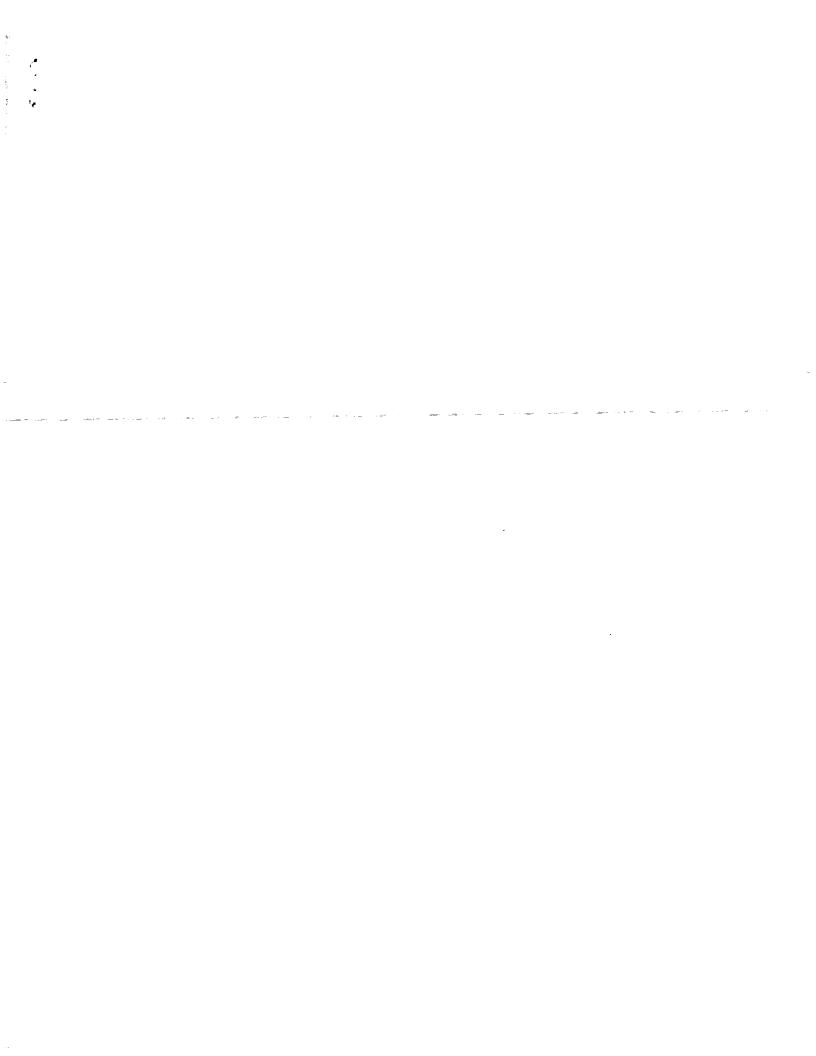
Query Match

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Search completed: December 21, 2000, 08:35:38 Job time: 601 sec

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Duran R., Chion C.K., Bigey F
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nitrile hydratase.";
J. Basic Microbiol. 32:13-19(
SEQUENCE 19 AA; 1923 MW;
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Outer membrane; Antigen.
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    SUBUNIT (FRAGMENT).

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Last annotation update)
N P1.16 (PORIN)(FRAGMENT).
                                                                                                                                                                                                                         F., Arnaud 
sequences of
Score 25; DB 2;
Pred. No. 1.2e+03;
1; Mismatches 1
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Pred. No. 1.2e
1; Mismatches
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1; Mismatches
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subtype
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1.2e+03;
7;
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1.1e+03;
                                                                                                                                                                                                                         A., Galzy P.;
f Brevibacterium
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Matches 4
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Best Local Similarity
Matches 4; Conserv
                                                                                        "Identification of the rat xanthine dehydrogonacteic Acids Res. 22:1846-1854(1994).
EMBL; U08123; AAB60444.1; -.
NON TER 19 19 H -> O.
NON_TER 19 19 H -> O.
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Q9U8E7;
01-MAY-2000 (TrEMBLrel. 13, Cres
01-MAY-2000 (TrEMBLrel. 13, Lass
01-MAY-2000 (TrEMBLrel. 13, Lass
PARED DOMAIN TRANSCRIPTIONAL F)
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SEQUENCE
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XU P.-X., YOON A., Heaney S.

"The regulation of Pax6 is c
Submitted (AUG-1998) to the
EMBL; AF089733; AAD54001.1;
                                                                                      SEQUENCE
                                                                                                                                                                                                      Rattus norvegicus (Rat)
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Drosophila melanogaster (Fruit fly).
Drosophila melaroa; Arthropoda; Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopteryda; Diptera; Brachycera; Musc
Ephydroidea; Drosophilidae; Drosophila.
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(TrEMBLrel. 13, Last sequence update)
(TrEMBLrel. 13, Last annotation update)
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dehydrogenase/oxidase
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01-JUL-1997 (TrEMBLrel. 04, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence up
01-NOV-1999 (TrEMBLrel. 12, Last annotation
HYPOTHETICAL 2.3 KDA PROTEIN (FRAGMENT).
                            Q9UCA3 PRELIMINARY;
Q9UCA3;
Q1-MAY-2000 (TrEMBLrel. 1
Q1-MAY-2000 (TrEMBLrel. 1
Q1-JUN-2000 (TrEMBLrel. 1
PROSTASIN (FRAGMENT).
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Eukaryota; Viridiplantae; I
Magnoliophyta; Liliopsida;
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Submitted (JAN-1997) to the EM
EMBL, Y10781; CAR71753.1; -.
Hypothetical protein.
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Massad G., Bahrani F.K., Mobley H.L.;

"Proteus mirabilis fimbriae: identification, i
characterization of a new ambient-temperature
Infect. Immun. 62:1989-1994(1994).

SEQUENCE 20 AA; 2017 MW; B2FC481003883AE2
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01-MAY-2000 (TrEMBLrel. 13, 1
01-MAY-2000 (TrEMBLrel. 13, 1
AMBIENT-TEMPERATURE FIMBRIA;
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ilarity 50.0
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JACALIN BETA-SUBUNIT:
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Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
25 KDA CHYMOTRYPSIN-LIKE ENZYME (FRAGMENT).
Lucilia cuprina (Greenbottle fly) (Australian sheep blowfly).
Lucilia cuprina (Greenbottle fly) (Australian sheep blowfly).
ENKATYOTA; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
ENKATYOTA; Meoptera; Endopterygota; Diptera; Brachycera; Musc(
Oestroidea; Calliphoridae; Lucilia.
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Yu J.X.,
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J. Biol. Chem.
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"Prostasin is
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Mgoc L.D., Brillard M., Hoebeke J.;

Mgoc L.D., Brillard M., Hoebeke J.;

"The alpha- and beta-subunits of the jacalins are cl.
from a 17-kDa precursor.";

Biochim. Biophys. Acta 1156:219-222(1993).

SEQUENCE 20 AA; 2071 MW; 8D5AE975F4D0E212 CRC64;
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Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; eudicotyledons; Rosidae; eurosids I; Rosales; Moraceae;
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IPR001254; -.
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a novel human serine
tissue distribution,
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SEQUENCE.
SEQUENCE.
ROZEK T., Wegener K.L., bv..
A Wallace J.C., Tyler M.J.;
RT "The antiblotic and anticancer aurei.
RT bell frogs Litoria aurea and Litoria raniic.
RL Eur. J. Biochem. 0:0-0(2000).
CC -i- FUNCTION: AUREIN 2.1 HAS ANTIMICROBIAL AND AMIDATION: AUREIN 2.1 HAS AUREIN 2.1.1.
Amidation; Antibiotic.
AMIDATION.
A: 1616 MW; 1D9A5DADB4D24f
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       REAR RANGE
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Matches 6; Conserv
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01-MAY-2000
01-MAY-2000
01-JUN-2000
MEDLINE; 95232503.
MEDLINE; 95232503.
Smith A.B., Esko J.D., Hajduk S.
"Killing of trypanosomes by the Science 268:284-286(1995).
                                                                                                                                                          01-MAY-2000 (TrEMBLrel. 13, 01-MAY-2000 (TrEMBLrel. 13, 01-JUN-2000 (TrEMBLrel. 14, HAPTOGLOBIN-RELATED PROTEIN Trypanosoma brucei.
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"The antibiotic and anticancer aurein peptides from "The antibiotic and anticancer aurein raniformis.";
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01-MAY-2000 (TrEMBLrel.
01-MAY-2000 (TrEMBLrel.
AUREIN 2.5.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                                                                                                       Eukaryota;
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J. Biochem. 0:0-0(2000).
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6; Conser
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                                                                                                                                    Euglenozoa; Kinetoplastida;
                                                                                                                                                                                                                                                                                                 PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and Litoria aurea (Australian frog). Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       508
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                                                                                                                                                                             Last sequence update)
Last annotation update)
BETA SUBUNIT (FRAGMENT)
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Pred. No. 2e+0
3; Mismatches
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Pred. No.
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1D9A5DADB4DAE2F9 CRC64;
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1D9A5DADB4D240F9
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ltoria raniformis.
                  .L.;
human haptoglobin-related
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2e+02;
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Q84274;
Q1-NOV-1996
Q1-NOV-1998
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Q9TWV8;
Q9TWV8;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-MAY-2000 (TrEMBLrel. 14, Last annotation update)
TRYPSIN-LIKE PROTEASE (DER F III ALLERGEN HOMOLOG)
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NON_TER
SEQUENCE
                                                                                                    MEDLINE: 93074427.
Ando T., Homma R., Ino Y., Ito G., Miyahara A., Yamakawa H., Okumura Y., Suko M., Haida M.;
"Is a trypsin-like protease of mites a Der f III allergen?";
Jpn. J. Allergy 41:704-707(1992).
SEQUENCE 20 AA; 2087 MW; 961537685DB396A2 CRC64;
                                                                                                                                                                                                                                                                                                  Dermatophagoides farinae (House-dust mite).
Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida; Acari;
Acariformes; Sarcoptiformes; Astigmata; Analgoidea; Pyroglyphidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            verruciformis.";
J. Gen. Virol. 68:3091-3103(1987).
EMBL; <u>D</u>00205; <u>B</u>AA00145.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1550 (FRAGMENT).
E6 PROTEIN (FRAGMENT).
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5; Conser
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75.0%;
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55.6%;
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  Score 27; DB Pred. No. 5.7e 2; Mismatches
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s of patients with epidermodysplasia
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pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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23	23	23	23	24	24	25	25	25	25.5	26	26	26	27	27	27	29	29	30	Score
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ALIGNMENTS

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Q9TR70;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
HAPTOGLOBIN BETA CHAIN (FRAGMENT).
Ursus arctos (Brown bear) (Grizzly bear).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Ursidae;
                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 95268704.

MEDLINE; 95268704.

Mominoki K., Nakagawa-Tosa N., Morimatsu M., Syuto B., Saito M.;

"Haptoglobin in Carnivora: a unique molecular structure in bear,
and dog haptoglobins.";
and dog haptoglobins.";
Comp. Biochem. Physiol. Biochem. Mol. Biol. 110:785-789(1995).

SEQUENCE 20 AA; 2020 MW; F605BCC82667DC3F CRC64;
             Litoria raniformis, and Litoria aurea (Australian frog).
Eukaryota; Metazoa; Chordata; Craniata; Verrebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                            01-MAY-2000 (TrEMBLrel. 13, Created)
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AUREIN 2.1/2.1.1.
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FIXA_RHILE
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01-JAN-1990
01-FEB-1995
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"Purification and characterization of a soybean flour-inducible ferredoxin reductase of Streptomyces griseus.";
J. Bacteriol. 173:7106-7112(1991).
-i- FUNCTION: COUPLE ELECTRON TRANSFER FROM NADH TO CYTOCHROME P450(SOY) IN THE PRESENCE OF FERREDOXIN.
-i- CAPALYTIC ACTIVITY: REDUCED FERREDOXIN + NAD(+) = OXIDIZED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Streptomyces griseus.
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae; Streptomyces.
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15-JUL-1998 (Rel. 36, Last annotation update)
FERREDOXIN--NAD(+) REDUCTASE (EC 1.18.1.3) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oxidoreductase; Flavoprotein; NAD; FAD; Magnesium.
NON_TER 16 16
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HSSP; P09063; 1LVL.
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                    PIR; PQ0022; reversion of the property of the property of the proside; PS01065; ETF_BETA; PARTIAL. PROSITE; PS01065; ETF_BETA; PARTIAL.
                                                                                                                                                                                                                                                                                    "Characterization and nucleotide sequence of a novel gene f upstream of the fixABC operon in Rhizobium leguminosarum."; Mol. Gen. Genet. 218.536-544(1889).
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FIXA PROTEIN (FRAGMENT).
                                                                                                              modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Hontelez J.G.J., I
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              Electron transport; Nitrogen NON_TER 18 18
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                                                                                                                                                                                                                               FIXATION.

SUBUNIT: FIXA AND FIXB FORM A HETERODIMER (PROBABLE).

SIMILARITY: BELONGS TO THE ETF BETA-SUBUNIT / FIXA FAMILY.
                                                                                                                                                                                                                                                                          FUNCTION: MAY PLAY A ROLE
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Search completed: December Job time: 441 sec

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01-MAY-1992
01-MAY-1992
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01-MAY-1992 (Rel. 22, Last sequence update)
01-MOV-1997 (Rel. 35, Last annotation updat
TRICHOLONGIN BI AND BII.
Trichoderma_longibrachiatum.
                                                                                                   MOD_RES
                                                                                                                                                                                                                                                           Spectroscopy.";

Spectroscopy.";

Eur. J. Biochem. 201:661-674(1991).

-i- FUNCTION: TRICHOLONGINS ARE PEPTIDES WHICH DISPLAY ANTIFUNGAL

-i- FUNCTION: TRICHOLONGINS ARE PEPTIDES WHICH DISPLAY ANTIFUNGAL

AND ANTIBACTERIAL ACTIVITY. PROBABLY INTERACT WITH BIOLOGICAL

AND ANTIBACTERIAL ACTIVITY. PROBUCES HOLES LEADING TO LEAKAGE.
                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Fungi; Ascomycota; anamorphic Ascomycota;
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Rebuffat S., Prige
"Tricholongins BI
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I, 19-residue peptaibols from Trichoderma
n structure from two-dimensional NMR
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Pred. No. 1.1e
1; Mismatches
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Pred. No. 1.1e+03
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                            SAMP_MUSCA STANDARD;
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01-NOV-1990 (Rel. 16, Last
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SERUM AMYLOID P-COMPONENT (
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15-JUL-1998 (Rel. 32, Last sequence update)
15-JUL-1998 (Rel. 36, Last annotation update)
TRYPSIN-LIKE PROTEASE (EC 3.4.21.-) (FRAGMENT).
Streptomyces exfoliatus (Streptomyces had-annotation)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-SMF13;

MEDLINE; 95291424.

Kim I.S., Lee K.J.;

Whysiological roles of leupeptin and extracellular proteases mycelium development of Streptomyces exfoliatus SMF13.";

Microbiology 141:1017-1025(1995).

-i- FUNCTION: INVOLVED IN MYCELIUM DIFFERENTIATION.

-i- FUNCTION: OR DEPARTMENT FAMILY C2A. ALSO KNOWN AS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mustelus
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SEQUENCE 19 /
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Pirmicutes; Actinobacteria; Actinobacteridae;

Pirmicutes; Actinobacteria; Actinobacteridae;
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Matches 3
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Best Local Similarity
Matches 3; Conser
                                                                                                                                                                                                                                                                                                                                   Flengsrud R., Skjeldal L.;
Flengsrud R., Skjeldal L.;
Fwo-dimensional gel electrophoresis separation and N-terminal sequence analysis of proteins from Clostridium pasteurianum W5 Electrophoresis 19:802-806(1998).

-i- MISCELLANEOUS: ON THE 2D-GEL THE DETERMINED PI OF THIS UNK PROPERTN IS: 5.4, ITS MW IS: 38.2 KDA.
FENR_STRGR STANDARD;
P24134;
01-MAR-1992 (Rel. 21, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UN46_CLOPA STANDARD; PRT; 14 AA. P81362; 15-JUL-1998 (Rel. 36, Created) 15-JUL-1998 (Rel. 36, Last sequence update) 15-JUL-1998 (Rel. 36, Last annotation update) UNKNOWN PROTEIN CP 46 FROM 2D-PAGE (FRAGMENT).
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                                                                                                                                                                                                                                                                                                                     NON_TER
SEQUENCE
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Bacteria; Firmicutes; Bacillus/Clostridium group;
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ARRANGEMENT OF 5 NONCOVALENTLY BOUND SUBUNITS:
-i- DISEASE: SAP IS A PRECURSOR OF AMYLOID COMPONENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 83160932.
Robey F.A., Tanaka T., Liu T.-Y.;
"Isolation and characterization of two major serum prote dogfish, Mustelus canis, C-reactive protein and amyloid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clostridium
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Elasmobranchii; Galeomorphii;
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1 >9 PENTAXIN.
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30-MAY-2000 (Rel.
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30-MAY-2000
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Aust. J. Chem. 49:475-484(1996).
Aust. T. Chem. 49:475-484(1996).
I. MESENTERIOUS SHOWS A MEDIUM ANTIBACTERIAL ACTIVITY AGAINST B.CE
L. MESENTERIODES AND S.UBERIS.
I. MESENTERIODES AND S.UBERIS.
I. TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
I. MASS SPECTROMETRY: MW-1974; METHOD-FAB.
Amphibian skin; Antibiotic.
SEQUENCE 19 AA; 1975 MW; 2F34EF077BA35B70 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UPERIN 2.3.
                                                                                                                                                                                                                       COG1_CHIOP STANDARD; PRT; 20 AA.

P34153;
01-FEB-1994 (Rel. 28, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
01-NOV-1995 (Rel. 32, Last annotation update)
COLLAGENOLYTIC PROTEASE 25 KDA II/II (EC 3.4.21.32) (FRAGM Chionoecetes oplilo (Crab-beetle).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-SKIN SECRETION;
Bradford A.M., Raftery M.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amphibia; Batrachia; Anura; Neobatrachia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Uperoleia inundata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UP23_UPEIN
                                                                                                                                                                                                                                                                                                                                 _CHIOP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Uperoleia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Adams G.W., Severini
                                                                                                            Klimova O.A., Vedishcheva Y.V., Strongin A.Y.; "Isolation and characteristics of collagenolytic enzymes hepatopancreas of the crab Chionoecetes opilio."; Dokl. Akad. Nauk SSSR 317:482-484(1991).
                                                                                                                                                             MEDLINE;
                                                                                                                                                                           TISSUE=HEPATOPANCREAS;
                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                              Eubrachyura;
            INTERPRO; IPRO01254; PROSITE; PS00134; TRYPS
                                                                                                  <del>'</del>-
                                     HSSP; P00771;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EIFQEVVGG
                                                            FUNCTION: THIS ENZYME IS A SERINE PROTEASE CAPABLE
THE NATIVE TRIPLE HELIX OF COLLAGEN.
CATALYTIC ACTIVITY: BROAD SPECIFICITY; DEGRADES NAT
SIMILARITY: BELONGS TO PEPTIDASE FAMILY S1; ALSO KN
                                                 TRYPSIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                DLAKKVVGG 12
                                                                                                                                                                                                                                                                                                                                                                                                                              4; Conserv
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                                                                                                                                                             92120073
   PS00134; TRYPSIN_HIS; PS00135; TRYPSIN_SER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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Last
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annotation
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Pred. No. 5.2e
4; Mismatches
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     PARTIAL.
PARTIAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tyler M.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                               2e+02;
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                                                                                                                                                                                                                                                                .21.32) (FRAGMENT).
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                                                                               NATIVE
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                                                                                                      DEGRADING
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                                                                   AS
                                                                               COLLAGEN
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                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
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Best Local
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NON_TER
SEQUENCE
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P22779;
01-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-AUG-1991 (Rel. 19, Last sequence up 15-DEC-1998 (Rel. 37, Last annotation CYTOCHROME P450 2A (OLF2) (OLFACTIVE)
                                                                                                                                                                                                                                                                                                                                                                                                                                          Lazard D., Tal N., Rubinstein M., Khen M., Lancet "Identification and biochemical analysis of novel cytochrome P-450IIA and UDP-glucuronosyl transfera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bos taurus
                     30-MAY-2000 (
30-MAY-2000 (
30-MAY-2000 (
UPERIN 2.7.
                                                                                     _UPEMJ
                                                                                                                                                                                                                           VARIANT
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                           Microsome;
NON_TER
VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                       Biochemistry 29:7433-7440(1990).
-I- FUNCTION: CYTOCHROMES P450 ARE A GROUP OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 91027757.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bovidae; Bovinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota;
                                                                                                                                                                                                                                                                                                                                 -i- CATALYTIC ACTIVITY: RH + REDUCED FLAVOPROTEIN + OXIDIZED FLAVOPROTEIN + H(2)O.
-i- SUBCELLULAR LOCATION: MEMBRANE-BOUND. ENDOPLASMI-i- SIMILARITY: BELONGS TO THE CYTOCHROME P450 FAMIL
                                                                                                                                                                                                                                                                                Oxidoreductase; Monooxygenase; Electron transport; Microsome; Endoplasmic reticulum; Olfaction.
                                                                                                                                                                                                                                                                                                     PROSITE;
                                                                 P82039;
                                                                           UP27_UPEMJ
                                                                                                                                                                                                                                                                                                               INTERPRO;
Uperoleia mjobergii
Eukaryota; Metazoa;
                                                                                                                                9
                                                                                                                                                                                                                                                                                                              MONOOXYGENASES. IN LIVER MICROSOMES, THIS I NADPH-DEPENDENT ELECTRON TRANSPORT PATHWAY. OF STRUCTURALLY UNRELATED COMPOUNDS, INCLUIACIDS, AND XEMOBIOTICS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VVGGFPSQAQVTVH
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                                                                                                                               QQAFKELQG
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                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                     PS00086;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Serine protease;
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                                                                                                                                                                                                                             18
                                (Rel. 39, Created)
(Rel. 39, Last sequence update)
(Rel. 39, Last annotation updat
                                                                                                                                                                         Conservative
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8 AA;
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35
    (Australian toadlet
Chordata; Craniata;
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44.4%;
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                                                                                                                                                                                                                              MW;
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Pred. No. 5.5e
2; Mismatches
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                                                                                                                                                                                     Score 23; Pred. No. 7
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(P52) (1
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THIS ENZYME IS INVOLVED
ATHWAY. IT OXIDIZES A VAR
INCLUDING STEROIDS, FATT
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     Vertebrata;
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                                                                                                                                                                                                                                CRC64;
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                                                                                                                                                                                                Length 18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                        D., Zupko K.;
olfactory-specific
                                                                                                                                                                              Indels
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       Euteleostom1;
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TRYP_FELCA
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Best Local S
Matches 4
                    CHAIN
NON_TER
                                                                                                                                                                                                          Steiner J.M., Medinger T.L., Williams D.A.;

*Purification and partial characterization of feline Comp. Biochem. Physiol. 116B:87-93(1997).

-!- CATALYTIC ACTIVITY: PREFERENTIAL CLEAVAGE: ARG-,
-!- SUBCELLULAR LOCATION: EXTRACELLULAR.

-!- SIMILARITY: BELONGS TO PEPTIDASE FAMILY S1; ALSO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
TRYPSIN PRECURSOR (EC 3.4.21.4) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
COCCONASE (EC 3.4.21.-) (FRAGMENT)
SEQUENCE
                                                               PROSITE: PS00134; TRYPSIN_HIS; PARTIAL.
PROSITE: PS00135; TRYPSIN_SER; PARTIAL.
Hydrolase; Serine protease; Digestion; PROPEP
ROPEP
1 8 ACTIVATION
                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Felis silvestris catus (Cat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Felidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TRYP_FELCA P81071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COCO_LIMPO
P35586;
                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-PANCREAS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Law J.H., Dunn r.E., nrum."
"Insect proteases and peptidases.";
"Insect proteases and peptidases.";
Adv. Enzymol. Relat. Areas Mol. Biol. 45:389-425(1977).
                                                                                                                                                                                                                                                                                                                                                             MEDLINE;
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Law J.H., Dunn P.E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Limulus polyphemus (Atlantic horseshoe crab)
Eukaryota; Metazoa; Arthropoda; Chelicerata;
                                                                                                                                                                  (NTERPRO; IPR001254; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hydrolase; Serine protease.
NON_TER 14 14
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:|||
1 IVGGF 5
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nes 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBCELLULAR LOCATION: EXTRACELLULAR.
SIMILARITY: BELONGS TO PEPTIDASE FAMILY S1; ALSO KNOWN AS
                                                                                                                                                                                      TRYPSIN FAMILY
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16
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AΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
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 Amphibian SEQUENCE
                     "Novel uperin peptides from the dorsal glands of the floodplain toadlet Uperoleia inundata.";
Aust. J. Chem. 49:475-484 (1996)
-I- FUNCTION: SHOWS A WEAK ANTIBACTERIAL ACTIVITY AGA E.COLI, L.MESENTERIODES, L.INNOCUA, M.LUTEUS, P.H. S. AUREUS AND S. UBERIS.
-I- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL G.II. MASS SPECIFOMETRY: MW=1926; METHOD=FAB.
                                                                                                                                                                                                 Uperoleia inundata (Floodplain toadlet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachi
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Bradford A.M., Raftery M.J., Bowie
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SwissProt_39:*
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p35586 limulus pol
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p13136 clostridium
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p14313 rhizobium l
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protein QA300027 - Arabidopsis thaliana (fragment)
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 30-Jun-1992 #sequence_revision 06-Jan-1995 #text_change 06-Jun-1997
C;Accession: PA0026
R;Kamo, M.; Kawakami, T.; Miyatake, N.; Tsugita, A.
submitted to JIPID, July 1994
A;Bescription: Separation and characterization of Arabidopsis proteins by two-dimensiona A;Reference number: PA0001
A;Accession: PA0026
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R; Lazard, D.; Tal, N.; Rubinstein, M.; Khen, M.; Lancet, D.; Zupko, K.
Blochemistry 29, 7433-7440, 1990
A:Title: Identification and biochemical analysis of novel olfactory-specific cytochrome A:Reference number: A35704; MUID:91027757
A:Accession: A35704
A:Rosidues: 1-18 <LAZ>
C:Conticus
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A; Residues: 1-15 <KAM>
A; Experimental source: leaf
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nypodermin B - early cattle grub (fragment)
C:Species: Hypoderma lineatum (early cattle grub)
C:Date: 05-Jun-1987 #sequence_revision 05-Jun-1987
C:Accession: A20190
R:Lacronicae
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C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change:
C;Accession: A45806
R;Dent, A.L.; Fink, P.J.; Hedrick, S.M.
J. Immunol. 143, 322-328, 1989
A,Title: Characterization of an alternative exon of the murine T A;Reference number: A45806; MUID:89278666
A;Accession: A45806
A;Status: preliminary
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hypothetical THRA1/BTR mutant fusion protein, cell line BT474 - C;Specites: Homo sapiens (man) C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change C;Accession: I52698 R;Futreal, P.A.; Cochran, C.; Marks, J.R.; Iglehart, J.D.; Zimme
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA A; Residues: 1-20 <DENA, Residues: 1-20 <DEN
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A45806
T-cell receptor beta chain C region type 1 - human (fragment)
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A;Accession: A20190
A;Molecule type: protein
A;Residues: 1-16 <LEC>
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Pred. No. 5.1e+02;
0; Mismatches 1
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Pred. No. 8.6e+02;
5; Mismatches 5;
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5.5e+02;
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         J.D.; Zimmerman, W.; Barrett,
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A; Experimental source: cytolytic T-lymphocyte C; Superfamily: immunoglobulin homology C; Keywords: receptor; T-cell
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C;Species: Mus musculus (house mouse)
C;Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 11-Apr-1995
C;Accession: PH1448
R;Casanova, J.L.; Martinon, F.; Gournier, H.; Barra, C.; Pannetier, C.; Regnault, A.;
J. Exp. Med. 177, 811-820, 1993
A;Title: T cell receptor selection by and recognition of two class I major histocompa A;Reference number: PH1430; MUID:93171821
A;Accession: PH1448
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C;Species: Mus musculus (house mouse)
C;Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 17-Mar-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Gene: THRA1/BTR
A;Map position: 17q11.2
C;Keywords: fusion protein
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A; Accession: I52698
A; Status: translated from GB/EMBL/DDBJ
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Biochem. Biophys. Res. Commun. 204, 357-365, 199.
A;Title: Characterization of high-molecular-mass
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A; Residues: 1-15 <FUT>
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A; Residues: 1-14 < CAS>
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Pred. No. 8.7e
1; Mismatches
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Pred. No. 7.5e+02;
                       Score 23; DB 2;
Pred. No. 1e+03;
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7 VVGGFPS 13

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C; Keywords: heterodimer;
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A:Title: Identity of brain-associated small cell lung cancer antigen and the CD56 (NKH-); Reference number: A61392; MUID:92046737
A:Accession: A61392
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R;Webb, M.; Taylor, I.A.; Firman, K.; Kneale, J. Mol. Biol. 250, 181-190, 1995
A;Title: Probing the domain structure of the A;Reference number: S56121; MUID:95333175
A;Accession: S56122
                                                                                                                                                                A; Molecule type: protein A; Residues: 1-20 < NAK>
                                                                                                                                                                                                        J. Biol. Chem. 265, 660-665, 1990
A;Title: Three isozymes of catechol 1,2-dioxygenase
A;Reference number: A34917; MUID:90110118
A;Accession: C34917
                                                                                                                                                                                                                                                                             C;Accession: C34917
R;Nakai, C.; Horiike, K.; Kuramitsu, S.; Kagamiyama,
                                                                                                                                                                                                                                                                                                                 C:Date: 20-Jul-1990 #sequence_revision 20-Jul-1990 #text_change 10-Feb-1995
                                                                                                                                                                                                                                                                                                                                          catechol 1,2-dioxygenase (EC 1.13.11.1) beta chain - Pseudomcnas sp. (fragment)
N;Alternate names: pyrocatechase beta chain
C:Species: Pseudomonas sp.
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A;Molecule type: protein
A;Residues: 1-18 <UME>
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C;Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Sep-1994
C;Accession: A61392
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C:Species: Escherichia coli
C:Date: 27-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 03-Nov-1995
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                                          Score 26; DB 2;
Pred. No. 4.8e+02;
2; Mismatches
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Pred. No. 4.3e+02;
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2.7e+02;
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                                            Indels
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                                              T-cell receptor alpha chain (clone A24/PEF5) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 11-Apr-1995
                                     A; Reference number: PH1430; A; Accession: PH1436
                                                                                                                                                                                                                    RESULT
PH1436
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A;Residues: 1-5 <KRA>
C;Keywords: hydrolase; serine proteinase; zymogen
F;1-5/Product: cocoonase (fragment) #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Kramer, K.J.; Felsted, R.L.; Law, J.H. J. Biol. Chem. 248, 3021-3028, 1973 A;Title: Cocoonase. V. Structural studies on A;Reference number: A61168; MUID:73166540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cocoonase (EC 3.4.21.-) - Chinese oak silkmoth (fragment) C;Species: Antheraea pernyl (Chinese oak silkmoth) C;Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_C;Accession: B61168
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A;Note: lectin for D-galactosyl-beta-1->3-N-acetylgalactosamine,
C;Keywords: heterotetramer; lectin; seed; storage protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Experimental source: seed C; Complex: heterotetramer; two alpha and two C; Function:
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A; Molecule type: mRNA
A; Residues: 1-15 <CAS>
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Pannetier, C.; Regnault,

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Maximum Match 100%
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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 29
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25 - 5
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1: pir1:*
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Qу	Query Match Best Local Matches	RESULT A61557 major me C; Specie. C; Date: C; Access R; Heldri. Biol. Ce A; Title: A; Refere A; Access A; Status A; Molecu A; Residu C; Keywor	Query Ma Best Loo Matches Qy 7	RESULT A60551 Leukocytk C; Species C; Date: C; Access: R; Axelss Scand J A; Title: A; Referen A; Recess A; Molecu A; Residue C; Superf: C; Keyworv C;		33333333333333333333333333333333333333
2 EIFQEVVGGFPS 13 : : 4 ESYQELVAVTPS 15	Match Local Similarity 50.0% Social Similarity 50.0%	RESULT 2 A61557 A61557 C;Species: Plasmodium falciparum C;Species: Plasmodium falciparum C;Date: 28-Oct-1994 #sequence_revis C;Accession: A61557 R;Heldrich, H.G. Biol. Cell 64, 205-214, 1988 A;Titte: Isolation and functional c A;Reference number: A61557; MUID:89 A;Accession: A61557 A;Status: preliminary A;Molecule type: protein A;Residues: 1-17 <hei>C;Keywords: surface antigen</hei>	28.4 3al Similarity 62.5 5; Conservative VVGGFPSQ 14 : : IVGGRPAQ 8	RESULT 1 A60551 leukocyte elastase (EC 3.4.21.37) - dov C; Species; Canis lupus familiaris (dog C; Date: 17-Apr-1993 #sequence_revision C; Accession: A60551 R; Axelsson, L.; Bergenfeldt, M.; Bjoer: Scand. J. Clin. Lab. Invest. 50, 35-42 A; Title: Release of immunoreactive can A; Reference number: A60551; MUID:90193 A; Accession: A60551 A; Molecule type: protein A; Residues: 1-16 < AXE> C; Superfamily: trypsin; trypsin homolo C; Keywords: hydrolase; leukocyte; lyso		21.5 21.1 20 21.5 21.1 20 21.5 21.1 20 21.5 21.1 20 21.5 21.1 20 21.6 12 21 20.6 13 21 20.6 14 21 20.6 14 21 20.6 14 21 20.6 14 21 20.6 14 21 20.6 14 21 20.6 15 21 20.6 14
	%; Score 27; DB 2; %; Pred. No. 2.7e+02 2; Mismatches	alaria parasite ion 28-Oct-1994 ion fracterization	%; Score 29; DB 2; %; Pred. No. 1.2e+02 2; Mismatches	g (fragment)) 17-Apr-1993 k, P.; Olsson , 1990 ine leukocyte 608 gy some; serine	ALIGNMENTS	2 S71601 2 S29108 2 A61327 2 A61327 2 PH1189 2 PH1180 2 PH1172 2 PH1175 2 PH1175 2 PH1175 2 PH0015 2 PA0015 2 PS0278 2 PS0278
	Length 17; ; 4; Indels 0; Gaps	(Plasmodium falciparum) #text_change 09-Jun-2000 of Plasmodium falciparum	Length 16; ; 1; Indels 0; Gaps	text_change 17-Mar-199 R.; Ohlsson, K. elastase normally and		recombination prot glutathione transf trypsin (EC 3.4.21 collagenolytic pro T-cell receptor al T-cell receptor al
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; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-286-889-15
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                                                                                                                                                                                                                                                                                                                                                                Sequence 15, Application US/08485618
Patent No. 5728533
GENERAL INFORMATION:
APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5728533el Human
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: P38,659
REFERENCE, DOCKET NUMBER: 27866/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEPHONE: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 15:
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Matches 5; Conserv
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PRIOR APPLICATION DATA:
RAPPLICATION UMBER: US 08/
FILING DATE: 23-DEC-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
          FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,497
FILING DATE: 23-DEC-1993
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MEDIUM TYPE: Floppy disk
COMPUTER: IDM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
PRIOR APPLICATION DATA
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CITY: Chicago
STATE: Illinoi:
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STREET: 2:
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                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Chicago
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233 South Wacker Drive, 6300 Sear Tower
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55.6%;
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Pred. No. 44;
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;; TYPE: amino acid
;; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-485-618-15
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                                                                                                                                      Query Match
Best Local Similarity
"atches 5; Conserva
Search completed: December 21, 2000, 08:31:48
Job time: 371 sec
                                                                                                                                                                                                                                                                                                                                           TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/362,652
FILING DATE: 21-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27866/32797
                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 11 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US (
FILING DATE: 5-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US (
                                                                                     1 VFQEXGAGF 9
                                                                                                                     3 IFQEVVGGF 11
                                                                                                                                                        Conservative
                                                                                                                                                                        26.5%;
55.6%;
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                                                                                                                                                      Score 27; DB 1;
Pred. No. 44;
1; Mismatches
                                                                                                                                                      3; Indels
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US-08-669-284B-26
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Best Local Similarity 75.0
Best Local Similarity 75.0
Best Local Similarity 75.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                           TELEFAX: (202)293-7860 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, VeCUREENT APPLICATION DATA:
APPLICATION UNMBER: US/08/669,284B
FILING DATE: 28-JUN-1996
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Nakayama, Chikao
APPLICANT: No. 5939534uchi, Hiroshi
TITLE OF INVENTION: NOVEL HUMAN CILIARY NEUROTROPHIC FACTORS
NUMBER OF SEQUENCES: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Ishige, Yoko
APPLICANT: Ito, Akira
APPLICANT: Kimura, Toru
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 12 amino acids
                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (202)293-7060
TELEFAX: (202)293-7860
                                                                                                                                                                                                                                                  APPLICATION NUMBER: JP 05-350934 FILING DATE: 29-DEC-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: JP 06-268281 FILING DATE: 05-OCT-1994 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/
FILING DATE: 27-DEC-1994
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: SUGHRUE, MION, ZINN, MACDEAK & SEAS
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               TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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                                                                                                        SEQUENCE CHARACTERISTICS:
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STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: JP 00 FILING DATE: 02-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 2100 Penr
CITY: Washington
STATE: D.C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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                                               STRANDEDNESS:
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Kikuchi, Kaoru
Ishige, Yoko
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                                                                                       8 amino acids
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75.0%;
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Pred. No. 32;
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                                                                        : Sequence 15, Application US/08286889
: Patent No. 5470953
: GENERAL INFORMATION:
                                                                                                                            US-08-286-889-15
                                                                                                                                           RESULT
                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Watches 5; Conserv?
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Best Local S
Matches 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 312-474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
           APPLICANT: Gallatin, W. Mich
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: NO. 5470953e1
NUMBER OF SEQUENCES: 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 312-474-6300 TELEFAX: 312-474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
ATTORNAY/AGENT INFORMATION:
NAME: NO. 5437598and, Greta
REGISTRATION NUMBER: 35,302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Gallatin, W. Michael APPLICANT: Van Der Vieren, Monica TITLE OF INVENTION: No. 537958el TITLE OF INVENTION: Subunit
                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: Chicago
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5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                 11 amino acids
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                                                                                                                                                                                                                                                                                                                                               peptide
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71.4%;
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55.6%;
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Pred. No. 1.2e+05;
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Pred. No.
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                             Integrin Alpha Subunit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 112, Application US/08943363 Patent No. 5837478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Winter, Robert B.
REFERENCE/DOCKET NUMBER:
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 233 South Wacker Drive, 6300 Sear Tower
                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Gallatin, W. Michael
APPLICANT: Van der Vieren, Monica
TITLE OF INVENTION: No. 5837478el Human 2 Integrin Alpha
NUMBER OF SEQUENCES: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                           APPLICATION NUMBER: US 0 FILING DATE: 23-DEC-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                      CURRENT APPLICATION DATA
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                               PRIOR APPLICATION DATA:
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              APPLICATION NUMBER: US 08/286,889 FILING DATE: 5-AUG-1994
                                                                                                                   CLASSIFICATION: 530
                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                       CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29.4%;
Local Similarity 53.8%;
es 7; Conservation
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TYPE: amino acid
STRANDEDNESS: single
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CLASSIFICATION: 424
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APPLICATION
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1840 Dehavilland Drive
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                                                                             US 08/173,497
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Pred. No. 21;
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US-08-666-473-114; Sequence 114, Application US/08666473; Patent No. 5843713;
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Best Local Similarity
Matches 6; Conserv?
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APPLICANT: YOSHIDA, Aruto
APPLICANT: TAKEUCHI, MAKOto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO:
NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS_MS-DOS
SOFTWARE: PatentIn Release #1.0
                                                                     NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 166
TELECOMMUNICATION INFORMATION:
                                                                                                                                            APPLICATION NUMBER: JP 7-22101
FILING DATE: 09-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION UNMBER: JP 6-269111
FILING DATE: 01-NOV-1994
ATTORNEY_REENT INFORMATION:
                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/666,473
FILING DATE: 19-SEP-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/JP95/02238
FILING DATE: 01-NOV-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 271
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: PEPTIDE SEQUENCE THAT FORMS MUCIN SUGAR
TITLE OF INVENTION: CHAIN AND TECHNIQUE FOR MODIFYING PROTEIN TO BE LINKED
TITLE OF INVENTION: WITH MUCIN SUGAR CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 312-474-634
TELEFAX: 312-474-0448
TELEX: 25-3856
                                   TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 20007-5109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
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                                                       TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
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3000 K Street, N.W., Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 amino acids
                                 : (202)672-5300
(202)672-5399
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75.0%;
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Pred. No.
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                                                                                            16887/837
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                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,545B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 4.24
ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 920010.448C5
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 41, Application US/08468545B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 41:
TELEFAX: (:
INFORMATION FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,348A
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS: LENGTH: 15 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Cheever, Martin A. APPLICANT: Disis, Mary L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                           STREET: 6300 C
CITY: Seattle
STATE: Washing
                                                                                                                                                                                                                                                                                                                                                    COUNTRY: US
ZIP: 98104-7092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 6300 of CITY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Seed and Berry LLP STREET: 6300 Columbia Center,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 424
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                   (206)
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                 682-6031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IMMUNE REACTIVITY TO HER-2/neu PROTEIN FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30.4%;
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Pred. No. 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                             701 Fifth Avenue
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US-08-622-720A-23; Sequence 23, Application US/08622720A; Patent No. 5814308; GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 41
SEQUENCE CHARACTERISTICS:
FRUGTH: 15 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: US
ZIP: 98104-7092
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
COMPUTER: PC-DOS/MS-DOS
COMPUTER: PC-DOS/MS-DOS
COMPUTER: PC-DOS/MS-DOS
COMPUTER: PC-DOS/MS-DOS
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Best Local S
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,680B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Cheever, Martin A.

APPLICANT: Disis, Mary L.

APPLICANT: Disis, Mary L.

TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN

TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE

TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 92
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
   APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        "YORNEY AND ALCOHOM BY NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REGISTRATION NUMBER: 920010.448C4
                                                                                                                                                                                                                                                                                                                       TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 06-JUN CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Seattle
STATE: Washing
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TOPOLOGY: linear
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5; Conserv
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Zhang, Ke
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seed and Berry LLP
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                                                                                                                                                                                                                                 30.4%;
45.5%;
                                                                                                                                                                                                               Score 31; DB
Pred. No. 12;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 31;
Pred. No.
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                                                                                                                                                                                                               Gaps
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RESULT 3
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APPLICATION NUMBER: US/07/586,085
FILING DATE: 21-SEP-1990
             Patent No. 5219991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO:8:
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Best Local Similarity 53.0
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No. 5726023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 41, Application US/08467083
                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/414,417
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 320010.448C2
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1000 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,083
FILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/NEU PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/NEU ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 68
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                            CLASSIFICATION:
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53.8%;
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Pred. No. 11;
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US-08-486-348A-41
Sequence 41, Application US/08486348A
Patent NO. 5846538
GENERAL INFORMATION:
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Best Local S
Matches 5
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Best Local Similarity 45.5%;
Matches 5; Conservative
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APPLICANT: Cheeve
APPLICANT: Disis,
               APPLICANT: Cheever, Martin A. APPLICANT: Disis, Mary L. TITLE OF INVENTION: INMUNE REACTITLE OF INVENTION: FOR DIAGNOS TITLE OF INVENTION: HER-2/neu ONUMBER OF SEQUENCES: 69 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (206) 682-6031 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/414,417B
FILING DATE: 31-MAR-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 69
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920
TELECOMMUNICATION INFORMATION:
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MEDIUM TYPE: Floppy disk
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6300 Columbia Center, 701 Fifth Avenue
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Seed and Berry LLP
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FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
HER-2/neu ONCOGENE IS ASSOCIATED
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Pred. No. 12;
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Pred. No. 12;
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         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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DB seq length:
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         of hits satisfying chosen parameters:
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1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
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102
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US-08-666-473-114
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US-08-689-15
US-08-173-497-15
US-08-286-889-15
US-08-362-652-15
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US-08-485-618-15
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US-08-268-747C-22
US-08-274-696A-7
US-08-274-696A-1
US-08-474-696A-1
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Sequence 87, Appl Patent No. 5219991
Sequence 41, Appl Sequence 41, Appl Sequence 41, Appl Sequence 41, Appl Sequence 11, Appl Sequence 112, Appl Sequence 114, Appl Sequence 15, Appl Sequence 17, Appl Sequence 27, Appli Sequence 27, Appli Sequence 27, Appli Sequence 3, Appli Sequence 1, Appli Sequence 11, Appli Seque
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7 VVGGF	Fatent No. 5219991 Patent No. 5219991 APPLICANT: LEONARD, EDWI TEIZO, APPELLA, ETTORE TITLE OF INVENTION: MACI NUMBER OF SEQUENCES: 12 CURRENT APPLICATION NUMBER: (FILING DATE: 21-SEP-13 SEQ ID NO:12: LENGTH: 19 521991-12 Query Match Best Local Similarity 53 Methoc 27: COCCURENTS Number Of Services APPLICATION STRIP SEQ ID NO:12: SEQ ID NO:13: SEQ	r Match Local Simi les 8; 2 EIFQEVV 3 EIEDEVV	SULT 1 5:09-120-365-87 5:09-120-365-87 5:09-120-365-87 Sequence 87, Application U Patent No. 6103514 GENERAL INFORMATION: APPLICANT: Natori, Shunji TITLE OF INVENTION: NEW P FILE REFERENCE: 32290-144 CURRENT FILING DATE: 1998 EARLIER APPLICATION NUMBE EARLIER APPLICATION NUMBE EARLIER FILING DATE: 1997 NUMBER OF SEQ ID NOS: 101 SOFTWARE: Patentin Ver. 2 SEQ ID NO 87 LENCTH: 14 TYPE: PRT ORGANISM: Nicotiana 5-09-120-365-87		N U N N N N N N N N N N N N N N N N N N
Conser QAQVTV :	LEONARD, LEONARD, LEOTIONE VENTION: BEQUENCES LICATION CON NUMBE TILL 21-S	ch 1 Similarity 8; Conserva IFQEVVGGFPS 13 IEDEVVAGLPS 14	Application Application Application 1103514 NATTION: NATTION: NETTION: NETION: NETION: NETION: LICATION NULLICATION NULLICATION NULLICATION NULLICATION NULLICATION NULLICATION NULLICATION NULLICATION NULLICATION DATE: 1 1		00000000000000000000000000000000000000
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O28734;
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O1-NOV-1996 (TrEMBLrel. 01, Last sequence update)
O1-NOV-1996 (TrEMBLrel. 08, Last annotation update)
O1-NOV-1998 (TREMBLREL 08, Last annotation update)
TROPONIN T (FRAGMENT).
Oryctolagus cuniculus (Rabbit).
Oryctolagus cuniculus (Rabbit).
Oryctolagus cuniculus (Rabbit).
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MEDLINE; 83167564.
Putney S.D., Herlihy W.C.,
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SEQUENCE 20 AA; 1923 MW; 6B3ADDD464F4CD11 CRC64;
                                                                                                                 Putney S.D., Herlihy W.C., Schimmel A new troponin T and cDNA clones for
                                                                                Nature
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302:718-721(1983).
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Best Local :
                                                                                                                                                                                  SEQUENCE FROM N.A.

MEDLINE; 85160855.

Gargiulo G., Razvi F., Ruberti I., M.

"Chromatin-specific hypersensitive s:
histone gene injected into Xenopus od
J. Mol. Biol. 181:333-349(1985).

EMBL; M23777; AAA49737.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                         P70007 PRELIMINARY;
P70007;
01-FEB-1997 (TrEMBLrel. 0
01-FEB-1997 (TrEMBLrel. 0
01-NOV-1998 (TrEMBLrel. 0
HISTONE H4-1 (FRAGMENT).
                                                                                                                                                 EMBL; M23
NON_TER
SEQUENCE
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Zumstein E., Pearson B.M., Kalogeropoulos A.,
"A 29.425 kb segment on the left arm of yeast
more than twice as many unknown as known open
Yeast 11:975-986(1995).
EMBL; x83121; CAASSB13.1; -.

NON_TER

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879 MW; 7B5322D2C441E058 CF
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Q05403;
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Amphibia; Batrachia; Anura; Mesobatrachi
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DNA FOR ORF'S FROM CHROMOSOME XV (FRAGMENT).
Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi, Ascomycota; Saccharomycetes; Saccharomycetales;
Saccharomycetaceae; Saccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                     Xenopus laevis (African clawed frog)
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                                              Conservative
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Pred. No.
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Pred. No. 3.3e+03;
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ia; Pipoidea; Pipidae;
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Q25355;
Q1-NOV-1
         024445;
01-JAN-1998 (TrEMBLrel. 05, Created)
01-JAN-1998 (TrEMBLrel. 05, Last sequence up
01-AUG-1998 (TREMBLrel. 07, Last annotation
THIS ORE RESIDES IN THE 5'UTR OF CPPHY2.
THIS ORF KBSILL.
Ceratodon purpureus (Moss,
Ceratodon y Viridiplantae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LIN K.S., Chuang N.N.;
Lin K.S., Chuang N.N.;
"Anionic glutathione S-transferases in shrimp eyes.";
Comp. Biochem. Physiol. B, Comp. Biochem. 105:151-156(1993).
SEQUENCE 20 AA; 2254 MW; 5D6A7ABCF09AD338 CRC64;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
GLUTATHIONE TRANSFERASE ISOZYME II (EC 2.5.1.18) (F
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SEQUENCE
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Eukaryota; Metazoa; Arthropoda; Trache
Pterygota; Neoptera; Orthopteroidea; O
Acridomorpha; Acridoidea; Acrididae; O
                                                                                                                                                                                                                                                                                                                                                                                                     VITELLOGENIN A (FRAGMENT)
                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NOV-1998 (TrEMBLRel. 08, Last annotation update)
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Eukaryota; Metazoa; Arthropoda; Crustacea;
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                                                                                                                                                                                                                                                                                                  Locke J., White B.N., Wyatt G.R.; "Cloning and 5' end nucleotide sequences of
                                                                                                                                                                                                                                                                               inducible vitellogenin genes DNA 6:331-342(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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         Embryophyta; Bryophyta; Bryopsida;
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Pred. No. 1.6e
1; Mismatches
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                                                                                                                                                                                                            Length 10;
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RESULT
O33345

ID 3254

AC Q5

   RESULT
Q9R5T4
ID Q9R5T4
AC Q9R5T4
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DT 01
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Best Local S
Matches 4
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Best Local S
Matches 4
SEQUENCE.
MEDLINE; 91372
Bahrani F.K.,
                                                                                                                                                                                            Q9R5T4;
Q9R5T4;
01-MAY-2000
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Q53545;
Q1-NOV-1996
Q1-NOV-1998
                                                                                               Bacteria;
                                                                                                                                   01-MAY-2000 (TEEMBLrel. 13, Created)
01-MAY-2000 (TEEMBLrel. 13, Last sequence update)
01-MAY-2000 (TEEMBLrel. 13, Last annotation update)
MRPA-MANNOSE-RESISTANT/PROTEUSLIKE (MR/P) FIMBRIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shigella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pasentsis K., Paulo N., Dittrich P., Algarra P., Thuemm Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases EMBL; U72993; AAB19059.1; -. SEQUENCE 17 AA; 1949 MW; 072DF72059DF1C7C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hughes J.E., Lamparter T., Mittmann Plant Physiol. 112:446-446(1996). [2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dicranidae; Dicranales; [1]
                                                                             Proteus.
                                                                                                                     Proteus mirabilis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE; 95394812.
Nakayama S., Watanabe H.;
"Involvement of cpxA, a s
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                                                                                                                                                                                                                                                                                                                                                                       14 VKYGLHN
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91372967.
F.K., Johnson
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                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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57.1%;
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                                                                                               gamma
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Last
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Pred. No. 2.8e
4; Mismatches
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   Robbins
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                                                                                               subdivision;
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annotation
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 D.,
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3.1e+03;
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2.8e+03;
 Mobley H.L.;
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                                                                                               Enterobacteriaceae;
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Best Local S
Matches 5
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Best Local
Matches
                                                  MEDLINE: 96273610.

NICOLAS M.G., Fujiki K., Murayama K., Suzuki M.T., Hayakawa M., Yoshikawa Y., Cho F., Kanai A.;

"Studies on the mechanism of early onset macular de studies on the mechanism of macularis) monkeys. I. Abnorr
                                                                                                                                                                                                                     01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE (FRAGMENT).
Macaca fascicularis (Crab eating macaque) (Cynomolgus monk
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Eukaryota; Metazoa; Chordata; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                             Q9TQZ5
Q9TQZ5;
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NON_TER
SEQUENCE
    cynomolgus (Macaca fascicularis) of two proteins in the retina."; Exp. Eye Res. 62:211-219 (1996). SEQUENCE 17 AA; 1671 MW; 52C(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q15892;
Q15892;
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Smith A.B., Esko J.D., Hajdu
"Killing of trypanosomes by
Science 268:284-286(1995).
SEQUENCE 19 AA; 2072 MW;
                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lee C.C., Yazdani A., Wehnert
Coolbaugh M.I., Chinault C.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1996 (TrEMBLrel. 01
01-NOV-1996 (TrEMBLrel. 01
01-AUG-1998 (TrEMBLrel. 07
(CLONE XP3B4A) (FRACMENT).
                                                                                                                                                                                                            Cercopithecinae;
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5; Conser
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071; AAA73882.1;
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83
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26
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07,
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Last annotation updat
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Pred. No. 3e+0
1; Mismatches
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Pred. No. 1.5e
6; Mismatches
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52CCD0D1A98B3DAF CRC64;
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Catarrhini;
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    Bailey J., Couch L., Xiong M.,
Baldini A., Lindsay E.A., Zhao Z.

                                                                                                                                                                                                                                                                                                                                                                                                17
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3e+05;
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1.5e+03
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                                                               Abnormal
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                                                                                degeneration
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                                                                                                                       Mineki R.,
                                                                                                                                                                                                                                                 Euteleostomi;
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                                                                                                                                                                                                                                                                    monkey)
                                                          concentrations
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Q9S8G6;
01-MAY-2000 (TrEMBLrel. 13
01-MAY-2000 (TrEMBLrel. 13
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TYPE 2 LECTIN (FRAGMENT).
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"Transposon Tn554: complete n
transposition-defective and a
EMBO J. 4:3357-3365(1985).
EMBL: X03216; CAA26955.1;
SEQUENCE 19 AA; 2257 MW;
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Eukaryota; Viridiplantae; Embryophyta; Tracheophyta;
Magnoliophyta; Liliopsida; Araceae; Colocasia.
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Bacteria; Firmicutes; Bacillus,
Bacillus/Staphylococcus group;
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nilarity 40.0%;
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AA; 2066 MW; F9C18865CA5860BA CRC64;
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nucleotide sequence and isolation
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3; Mismatches
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Listing first 45 summaries
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   SPTREMBL_14:*

1: sp_archea:*
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102
1 DVSGERAVMLLGRV
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sp_manmal:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

19	18	17	16	15	14	13	12	11	10	9	89	7	o	ر ت	4	ω	2	1	Result
22	22	22	22	22	22	23	23	23	23	23	23	24	24	24	24	24	25	25	Score
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ALIGNMENTS

RESULT Q9TWK7 ID AC	Qu Be Ma Qy	RP RA RA DR	AC DT	RESULT 031045 ID 0
9TWK7 9TWK7; 9TWK7; 1-MAY-2000 (TrEMBLrel. 13, 1-MAY-2000 (TrEMBLrel. 14, 1-MY-2000 (TrEMBLrel. 14, APTOGLOBIN-RELATED PROTEIN Trypanosoma brucei. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Query Match Best Local Similarity 44.4%; Matches 4; Conservative 4 10 LLGRVKYGL 18 : ::: 1 MLGIMRFGL 9	SEQUENCE FROM N.A. STRAIN-D132; Potter C.A., Baumberg S.; submitted (SEP-1997) to the E EMBL; AF026644; AAB82555.1; SEQUENCE 19 AA; 2080 MW;	045; JAN-1998 (TrEMBLrel. 05, JAN-1998 (TrEMBLrel. 07, AUG-1998 (TREMBLrel. 07, A LEADER PEPTIDE. A. A. A. Approximates coelicolor. Approximates c	O31045 PRELIMINARY;
; PRT; 19 AA. 13, Created) 13, Last sequence update) 14, Last annotation update) TEIN ALPHA SUBUNIT (FRACMENT). Kinetoplastida; Trypanosomatidae; Trypanosoma.	Score 25; DB 2; Length 19; Pred. No. 1.5e+03; ; Mismatches 1; Indels 0; Gaps	EMBL/GenBank/DDBJ databases. 1A591DC2999760D4 CRC64;	Created) Last sequence update) Last annotation update) bacteria; Actinobacteridae; neae; Streptomycetaceae; Streptomyces.	PRT; 19 AA.

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RESULT 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wilson S.D., Wang M., Filpula D.;
Submitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CATALYZES AN ELECTRONEGTRAL EXCHANGE BETWEEN ARGIN AND ORNITHINE TO ALLOW HIGH-EFFICIENCY ENERGY CONVERSION IN
                                                          modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                           MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transport;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-ATCC 4359;
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                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                        Vibrio
                                                                                                                                                                                                                                                                                                                                                                                PHOSPHOGLYCERATE

    -!- SIMILARITY: BELONGS TO THE PHOSPHOGLYCERATE KINASE FAMILY.

                                                                                                                                                                                                                                                                                                                                           Bacteria;
                      INTERPRO;
                                   EMBL; U72152; AAC44768.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YGLYD 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PERMEASES.
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                                                                                                                                                                                                                                                                                                                                                       cholerae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
3; Conserv
          pS00111; PGLYCERATE_KINASE;
                                                                                                                                                                                                                                                                                        97136637
                                                                                                                                                                                                                                                                                                                                           Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Amino-acid transport; Transmembrane;
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(Rel.
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                                                                                                                                                                                                                                                                                                                  N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BELONGS
                                                                                                                                                                                                                                                                                                                                                                          . 36, Created)
. 36, Last sequence update)
. 36, Last annotation updat
KINASE (EC 2.7.2.3) (FRAGM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1644 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19.6%;
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                                                                                                                                                                                                                                                                                                                                          gamma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 20; DB
Pred. No. 2.2e
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90B48A7C8FAA9705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ARCD/CADB/GERAB/LYSI
                                                                                                                                                                                                                                                                                                                                          subdivision; Vibrionaceae; Vibrio
                                                                                                                                                                                                                                                                                                                                                                              n update)
(FRAGMENT)
           PARTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
2.2e+03;
`~~ 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                          16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Inner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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RESULT 15
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Search completed:
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Best Local
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01-OCT-1994 (Rel. 3
01-OCT-1994 (Rel. 3
01-OCT-1994 (Rel. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NON_TER
SEQUENCE
                                                                                                                                                           NON_TER
SEQUENCE
                                                                                                                                                                                                    "Identification of tissue-specific isoforms for subunits Vb and VII
of cytochrome c oxidase isolated from rainbow trout.";
Eur. J. Blochem. 22:1:1111-1116(1994).
-!- FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN
MITOCHONDRIAL ELECTRON TRANSPORT.
-!- CATALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)O +
4 FERRICYTOCHROME C.
                                                                                                                                                                                                                                                                                                                                                      Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Protacanthopterygii; Teleostei; Buteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorh
                                                                                                                                                                       Oxidoreductase; Mitochondrion NON_TER 20 20
                                                                                                                                                                                                                                                                                                                       TISSUE-HEART,
                                                                                                                                                                                                                                                                                                                                                                                                     CYTOCHROME C (FRAGMENT).
                                                                                                                                                                                                                                                                                                Freund R., Kadenbach B.;
                                                                                                                                                                                                                                                                                                              MEDLINE;
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                                                        13 GEQAIAM
                                                                             4 GERAVML
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                                                                                                    Similarity
3; Conser
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                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            (Rel. 30, Last sequence update)
(Rel. 30, Last annotation update)
OXIDASE POLYPEPTIDE VIII-LIVER/HEART
          December 21,
                                                        19
                                                                              10
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                                                                                                                                                                                                                                                                                                                       AND LIVER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  30,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1789 MW;
                                                                                                                                                            2048 MW; 4977B9DE80E62C58 CRC64;
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         2000, 08:32:57
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Pred. No. 2.8e
3; Mismatches
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Pred. No. 2.
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                                                                                                                         DB 1;
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                                                                                                                8e+03
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                                                                                                     1; Indels
                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                         Oncorhynchus
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Best Local S
Matches 3
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Best Local S
Matches 4
                                                                                                        01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
CYTOCHROME C OXIDASE POLYPEPTIDE VIII-1 (EC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-MAY-2000
30-MAY-2000
30-MAY-2000
UPERIN 2.5.
  MEDLINE; 9 Arnold S.,
                      TISSUE-HEART, AND LIVER;
                                                                 Thunnus obesus (Bigeye tuna).
Eukaryota; Metazoa; Chordata; Craniata;
Actinopterygii; Neopterygii; Teleostei;
Acanthomorpha; Acanthopterygii; Percomor
                                                                                                                                                         COXQ_THUOB
P80983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _UPEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOD_RES
SEQUENCE
                                     SEQUENCE
                                                       Scombridae;
                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Amphibia; Batrachia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OF SPONTANEOUS CONTRACTIONS AND TONUS OF H
--- TISSUE SPECIFICITY: MIDGUT.
--- SIMILARITY: SOME SIMILARITY TO TACHYKININS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Uperoleia inundata (Floodplain toadlet).
Eukaryota: Metazoa; Chordata: Craniata: Vertebrata: Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tachykinin; Neuropeptide; Amidation.
MOD_RES 19 19 AMIDATI
                                                                                                                                                                                                                                                                                                                                                                                                                           Bradford A.M., Raftery M.J., Bowie Adams G.W., Severini C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-SKIN SECRETION;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jperoleia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UP25_UPEIN
                                                                                                                                                                                                                                                                     Local Similarity
nes 3; Conserv
                                                                                                                                                                                                                         9 VLGKIK 14
                                                                                                                                                                                                                                              10 LLGRVK 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: MYOACTIVE PEPTIDE. INCREASES THE AMPLITUDE AND FREQUENCY OF SPONTANEOUS CONTRACTIONS AND TONUS OF HINDGUT MUSCLE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NGERA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SCERA 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
          97454291.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 AA; 1930 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AND MASS
   Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Rel. 39, Created)
(Rel. 39, Last sequence update)
(Rel. 39, Last annotation updat
                                                         Thunnus.
                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
   Kim
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SPECTROMETRY
                                                                                                                                                                                                                                                                               20.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20.6%;
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 Song
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Pred. No. 1.8e
1; Mismatches
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••
                                                                                                                                                                                                                                                                              Score 21;
Pred. No.
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99B5471A011625E5 CRC64;
                                                                                                                                                                    PRT;
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                                                                 raniata; Vertebrata; Euteleostomi;
leostei; Euteleostei; Neoteleostei;
Percomorpha; Perciformes; Scombroidei;
  E .
                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                     J.H.,
  Linder
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                                                                                                                                                                                                                                                                                           DB 1;
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 D.,
                                                                                                        1.9.3.1) (FRAGMENT).
                                                                                                                                                                                                                                                                     0;
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                                                                                                                                                                                                                                                                                        Length 19;
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FJ
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                                                                                                                                 RESULT
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Best Local S
Matches 4
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Best Local S
Matches 3
                                                _PSEPU STANDARD; PRT; 16 AA P41147; P41147; 16 Rel. 31, Created) 01-FEB-1995 (Rel. 31, Last sequence update) 15-JUL-1998 (Rel. 36, Last annotation updata arginine/Ornithine antiporter (Fragment).
                                                                                                                                                                                                                                                                 Neuropeptide;
MOD_RES
SEQUENCE 8 A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AL16_CARMA
P81819;
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _CARMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NON_TER
SEQUENCE
                   Pseudomonas putida.
Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                       "Isolation and identification of multiple neuropepti allatostatin superfamily in the shore crab Carcinus Eur. J. Blochem. 250:727-734(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca; Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyu Eubrachyura; Portunoidea; Portunidae; Carcinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAY-2000 (Rel. 39, Last sequence update) 30-MAY-2000 (Rel. 39, Last annotation updat CARCINUSTATIN 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUR. J. BIOCHEM. 248:99-103(1997).

-!- FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CO-CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL O:
MITOCHONDRIAL ELECTRON TRANSPORT.

-!- CATALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2)
                                                                                                                                                                                                                                                                         -!- FUNCTION: MAY ACT AS A NEUROTRANSMITTER
-!- SIMILARITY: BELONGS TO THE ALLATOSTATIN
Neuropeptide; Amidation; Multigene family.
MOD_RES 8 8 AMIDATION.
                                                                                                                                                                                                                                                                                                                                                      Thorpe A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carcinus maenas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oxidoreductase; Mitochondrion. NON_TER 20 20
                                           ARCD
                                                                                                                                                                                                                                                                                                                                                                    Duve H.,
                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 98121193.
                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=CEREBRAL GANGLION,
                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kadenbach B.;
           seudomonas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "The subunit structure of cytochrome c oxidase
                                                                                                                                                                                      12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 SGERAVML 10 :||:|: : : 12 AGEQAIAM 19
                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12
                                                                                                                                                                  N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 FERRICYTOCHROME C.
                                                                                                                                                                  GPYSYGL
                                                                                                                                                                                     GRVKYGL 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 3; Conser
                                                                                                                                                                                                                                                                                                                                                                  Johnsen A.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 AA;
                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Common shore crab) (Green crab)
                                                                                                                                                                                                                                                                  813
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                                                                                                                                                                                                                     19.6%;
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37
                                                                                                                                                                                                                                                                  Μ¥.
                                                                                                                                                                                                                                                                                                                                                                  Maestro J.-L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . 58
                   gamma
                                                                                                                                                                                                                                                                                                                                                                                        AND THORACIC
                                                                                                                                                                                                                                                                 7C286B45AB476878
                                                                                                                                                                                                          0;
                                                                                                                                                                                                                     Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5BFEA5080A862C58 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                   subdivision; Pseudomonadaceae;
                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                     No;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NO :
                                                                                                                                                                                                                                                                                                                                                                  Scott A.G.,
                                                             update
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             update)
                                                                                                                                                                                                                      8.8e+04
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                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                            neuropeptides of
                                                                                                                                                                                                                                                                 CRC64
                                                                                                                                                                                                                                                                                                  FAMILY
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Brachyura;

Jaros P.P.,

ides of the
maenas.*;

Length

Indels

0,

Gaps

30-MAY-2000 30-MAY-2000 30-MAY-2000

(Rel. (Rel. (Rel.

39,

Created)
Last sequence
Last annotation

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Best Local S
Matches 4
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P01158;
P01158;
21-JUL-1986
21-JUL-1986
01-NOV-1997
                                                                                                                                                                                                                                                                                   21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence up
01-NOV-1997 (Rel. 35, Last annotation
DELTA SLEEP-INDUCING PEPTIDE (DSIP).
Oryctolagus cuniculus (Rabbit).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Temporins, antimicrobial temporaria.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Simmaco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-SKIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amphibia; Batrachia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TEMPORIN F.
Rana temporaria (European
                                           Schoenenberger G.A., Maier P.F., Tobler H.J., Wilson K., Monnier I "The delta EEG (sleep) inducing peptide (DSIP). XI. Amino-acid analysis, sequence, synthesis and activity of the nonapeptide."; Pflugers Arch. 376:119-129(1978).

-i- FUNCTION: WHEN INFUSED INTO THE MESODIENCEPHALIC VENTRICLE OF RECIPIENT RABBITS INDUCES SPINDLE AND DELTA EEG ACTIVITY AND REDUCED MOTOR ACTIVITIES.

-I- MISCELLANEOUS: THIS PEPTIDE WAS OBTAINED FROM DIALYSATES OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Barra D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                     RABIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Amphibian
             PIR;
                                                                                                                                       SEQUENCE, AND SYNTHESIS MEDLINE; 79054421.
                                                                                                                                                                       Schoenenberger G.A.;
"The delta sleep inducing peptide (DSIP).
the original and synthetic nonapeptide.";
Experientia 33:548-552(1977).
                                                                                                                                                                                                                 MEDLINE; 77185324.
Monnier M., Dudler L.,
                                                                                                                                                                                                                                                                           Eukaryota;
                                                                                                                                                                                                                                           SEQUENCE.
                                                                                                                                                                                                                                                              Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus
  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                      10
                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: HAS ANTIBACTERIAL ACTIVITY GRAM-POSITIVE BACTERIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY: BELONGS TO THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBCELLULAR LOCATION: SECRETED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FAMILY
 OCCIPITAL VENOUS SINUS BLOOD STIMULATION OF THE THALAMUS.; A01422; ODDBB.
UENCE 9 AA; 849 MW; DDD365
                                                                                                                                                                                                                                                                                                                                                                                                                LIGKVLSGI 12
                                                                                                                                                                                                                                                                                                                                                                                                                                    LLGRVKYGL 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Biochem.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97175050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        skin; Antibiotic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 AA;
                                                                                                                                                                                                                                                                             Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mignogna
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            242:788-792(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chordata; Craniata; Vertebrata; Anura; Neobatrachia; Ranoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G.,
                                                                                                                                                                                                                                                                             Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Anura; Neobatrachia;
                                                                                                                                                                                                                      Gachter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Canofeni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      common frog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 22; DB Pred. No. 9e+0 3; Mismatches
  DDD365BDDAA8787D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amidation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AMIDATION
                                                                                                                                                                                                                                                                             Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BREVININ/ESCULENTIN/GAEGURIN/RUGOSIN
                                                                                                                                                                                                                      ₽.
                                   FROM RABBITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S., Miele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    from
                                                                                                                                                                                                                       Maier
                                                                                                                                                                                                                                                                                                                         update)
                                                                                                                                                                                                                                                                                                             update)
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                                                                                                                                                                                                                       P.F.,
                                                                                                                                                                                                Comparative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    European
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CRC64;
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                                      KEPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mangoni M.L.,
                                                                                                                                                                                                                       Tobler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GRAM-NEGATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                      DIALYSATES
I ASLEEP BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Euteleostomi;
Ranidae; Rana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    red
                                                                                                                                                                                                                      н. J.,
                                                                                                                                                                                                properties
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    frog
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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                                      OF
ELECTRIC
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Query Match
Best Local Similarity

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Score Pred.

21; No.

DB 1; 8.8e+04;

Length

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RESULT
PHLC_ST
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TRP3_LEUMA
ID TRP3_L
ID TRP3_L
AC PP1/132
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Best Local S
Matches 7
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PHLC_STAIN
P80924;
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
SPHINGOMYELINASE C (EC 3.1.4.12) (BETA-TOXIN)
(NEUTRAL SPHINGOMYELINASE) (FRAGMENT).
                                                                                                                                                                                                                                                                                                            P81735;
30-MAY-2000
30-MAY-2000
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hemolysis; Hydrolase;
NON_TER 19 11
SEQUENCE 19 AA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Arch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Comparison of the beta-toxins from Staphylococcus intermedius.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Staphylococcus intermedius
                                                                                                                                                                                                                                                                30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence updated)
30-MAY-2000 (Rel. 39, Last annotation upo
TACHYKININ-RELATED PEPTIDE 3 (LEMTRP 3).
Leucophaea maderae (Madeira cockroach).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Guerra D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dziewanowska K., Edwards V.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacillus/Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacteria; Firmicutes;
                                       Muren J.E., Naessel D.R.;
Muren J.E., Naessel D.R.;
"Isolation of five tachykinin-related peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 97072006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                      Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta
Pterygota; Neoptera; Orthopteroidea; Dictyoptera; Blattaria;
                  the cockroach Leucophaea isoforms.";
                                                                                                            TISSUE=MIDGUT;
MEDLINE; 97053012.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ÷
                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                    Blaberoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 DVSGE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    h. Biochem. Biophys. 335:102-108(1996).

FUNCTION: REQUIRED, WITH SPHINGOMYELINASE TO EFFECT TARGET CELL FUNCTION: REQUIRED, WITH SPHINGOMYELINASE TO EFFECT TARGET CELL LYSIS (HEMOLYSIS). THE PH OPTIMUM IS 6.0-7.5. IT HAS A HIGH SPECIFICITY FOR SPHINGOMYELIN, HYDROLYZES LYSOPHOSPHATIDYLCHOLINE AT A MUCH LOWER RATE, BUT HAS NO ACTIVITY TOWARDS PHOSPHATIDYLCHOLINE, PHOSPHATIDYLETHANOLAMINE, OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PHOSPHATIDYLSERINE.
CATALYTIC ACTIVITY: SPHINGOMYELIN +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DASGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBUNIT: MONOMER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COFACTOR: MAGNESIUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHOLINE PHOSPHATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SGERAVMLLGRVKYGLHN
                                                                                                                                                                                                                                                                                                                                                                                                      LEUMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SGENQAEL ---- KLATHN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 7; Conserv
  Pept.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
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                                                                                                                                                                                                      Neoptera; Ort
n; Blaberidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
    65:185-196(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
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38
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bacillus/Clostridium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   group;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .98;
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Magnesium
                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
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No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                   update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DВ
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                                                                                                                                                                                                                                                                                                                                                                                                           β
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bohach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BETA-HEMOLYSIN)
                                                N-terminally exte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-ACYLSPHINGOSINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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01-AUG-1990 (Rel. 15, Created)
01-AUG-1990 (Rel. 15, Last sequence update)
01-FEB-1990 (Rel. 28, Last annotation update)
01-FEB-1994 (Rel. 28, Last annotation update)
TRANSALDOLASE III (EC 2.2.1.2) (FRAGMENT).
Pichia jadinii (Yeast) (Candida utilis).
Ekkaryota; Fungii Ascomycota; Saccharomycetes;
                                                                                                                                                                                                                                                    Transferase;
NON_TER
NON_TER
SEQUENCE 9
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                        CRBL_VESOR
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-I- SUBUNIT: MONOMER (BY SIMILARITY).
-I- SUBCELLULAR LOCATION: CYTOPLASMIC.
-I- MISCELLANEOUS: ON THE 2D-GEL THE DETERMINED PI OF THIS PROTEIN 5.6, ITS MW IS: 56.2 KDA.
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RESULT 5
CRBL_VESTR
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DE VESPID
OS Vespa
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RP SEQUEN
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01-AUG-1990 (Rel. 15, Created)
01-AUG-1990 (Rel. 15, Last sequence update)
01-AUG-1990 (Rel. 15, Last annotation update)
01-AUG-1990 (Rel. 15, Last annotation update)
11STAMINE RELEASING PEPTIDE II (HR-II).
Vespa orientalis (Oriental hornet).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Hymenoptera; Apocrita; Acvespoidea; Vespidae; Vespinae; Vespa.
                                                                                                                                                  Mast cell
                                                                                                                                                                                                                                                                                                                                                                         CRBL_VESTR STANDARD; PRT; 13 AA. P17231; 01-AUG-1990 (Rel. 15, Created) 01-AUG-1990 (Rel. 15, Last sequence update) 15-DEC-1998 (Rel. 37, Last annotation update) VESPID CHEMOTACTIC PEPTIDE T (VESCP-T).
                                                                                                                                                                                            Osaka (1983).
                                                                                                                                                                                                                        Yasuhara T., Nakajima T.,
(In) Sakakibara S. (eds.)
Peptide chemistry 1982, pp
                                                                                                                                                                                                                                                                        TISSUE-VENOM;
                                                                                                                                                                                                                                                                                                                   Vespa tropica (Hornet).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Hymenoptera; Apocrita; Ac
Vespoidea; Vespidae; Vespinae; Vespa.
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Rozynov B.V., Gushchin I.S.;
"Structure and properties of histamine
venom of Vespa orientalis hornet.";
Bioorg. Khim. 7:1467-1477(1981).
                                                                                                                                       SEQUENCE
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Gapop 10.0 , Gapext
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102
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CRBL_VESOR
CRBL_VESOR
CRBL_VESTAIN
TEMF_RANTE
DSIP_RABIT
PHLC_STAIN
TRP3_LEUMA
UP25_UPEIN
COXQ_THUOB
AL16_CARMA
ARCD_PSEPU
PGK_VIBCH
COXQ_ONCMY
FIBR_PACLE
TRY8_ECOLI
AL17_CARMA
IDHC_PIG
DCMM_PSECF
TEMG_RANTE
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Compugen Ltd
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P81346 clostridium
P17441 pichia jadi
P17236 vespa orien
P17231 vespa tropi
P56921 rana tempor
P01158 oryctolagus
P80175 leucophaea
P81735 leucophaea
P82031 uperoleia i
P80983
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7 morganella
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RESULT PGK_CLOPE ID PGK, AC P81: DT 15 DT 15 DT 15 DT 05 DT 05 Cloc CC Cloc CC Cloc CC Cloc RR SEQUENT RA Flee	Query N Best Lo Matches Qy 1(RESULT TEMA_EANT ID TEMA AC 30-M DT 30-M DT 30-M DT 30-M DT 30-M DT SEND C Amph RN SEDU RC TEME RX MEDI RA Barrr RT Tem RT Tem RT Tem RT Eur CC -!- CC -!- CC -!- CC Amph KW Amph SEQU SO SEQU SO SEQU	44440000000000000000000000000000000000
OPA GK_CLOPA STANDARD; PRT; 20 AA. B1346; 5-JUL-1998 (Rel. 36, Created) 5-JUL-1998 (Rel. 36, Last sequence update) 5-JUL-1998 (Rel. 36, Last annotation update) UTATIVE PHOSPHOGLYCERATE KINASE (EC 2.7.2.3) (CP 11 CK. IOSTRIDIUM PASTEURIANUM. 11 11 12 12 11 12 12 12 12 12 12 12 12	ery Match 24.5%; Score 25; DB 1; Length st Local Similarity 55.6%; Pred. No. 2.8e+02; tches 5; Conservative 2; Mismatches 2; Inde 10 LLGRVKYGL 18	ALIGNMENTS 1 ANTE EMA_RANTE STANDARD; PRT; 14 AA. 56917; 0-MAY-2000 (Rel. 39, Created) 0-MAY-2000 (Rel. 39, Last sequence update) 0-MAY-2000 (Rel. 39, Last sequence update) EMPORIN A. ana temporaria (European common frog). ukaryota; Metazoa; Chordata; Craniata; Vertebra- mphibia; Batrachia; Anura; Neobatrachia; Ranoid 10 EQUENCE, AND SYNTHESIS. EIDLINE; 97175050. ISSUE=SKIN; EIDLINE; 97175050. Temporaria."; EIDLINE; 97175050. Temporaria.", antimicrobial peptides from the Euro memporaria, antimicrobial peptides from the Euro Temporaria. 242:788-792(1996). 1- FUNCTION: HAS ANTIBACTERIAL ACTIVITY AGAINST 1- SUBCELLULAR LOCATION: SECRETED. 1- SIMILARITY: BELONGS TO THE BREVININ/ESCULENT FAMILY. EDUENCE 14 AA; 1469 MW; 601653612B9DECD4 CR	34 18 17.6 9 1 TALL_PICJA 35 18 17.6 15 1 FIBA_SYNCA 36 18 17.6 16 1 CFAB_BOVIN 37 18 17.6 16 1 CFAB_BOVIN 38 18 17.6 19 1 RS19_SPICI 39 18 17.6 20 1 CUDP_VERCH 10 18 17.6 20 1 SAMP_PLEPL 40 18 17.6 20 1 SAMP_PLEPL 41 17 16.7 10 1 RL16_ACHLA 42 17 16.7 10 1 RL16_ACHLA 43 17 16.7 10 1 TKNB_RANCA 44 17 16.7 10 1 TKNB_RANCA 45 17 16.7 10 1 TKS1_AEDAE
) (FRAGMENT). ostridiaceae;	h 14; dels 0; Gaps 0;	ta; Euteleostomi; ea; Ranidae; Rana. Mangoni M.L., pean red frog Rana GRAM-POSITIVE IN/GAEGURIN/RUGOSIN family.	P17440 pichia jadi P14463 syncerus ca P81187 bos taurus Q36834 trichophyto Q31159 spiroplasma P80406 verticilliu P20677 pleuronecte P37041 alligator m P29221 acholeplasm P08608 scyliorhinu P20689 rana catesb P42634 aedes aegyp

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Search completed: December 21, 2000, 08:30:06 Job time: 270 sec
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R;Bahrani, F.K.; Johnson, D.E.; Robbins, D.; Mobley, H.L.T.
Infect. Immun. 59, 3574-3580, 1991
A;Title: Proteus mirabilis flagella and MR/P fimbriae: isolation, purification, N-termin A;Reference number: A43594; MUID:91372967
A;Accession: B43594
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-20 <BAH>
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C:Species: Proteus mirabilis
C:Date: 11-Dec-1992 #sequence_revision 11-Dec-1992 #text_change 30-Sep-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein - moss (Ceratodon purpureus)
C;Species: Ceratodon purpureus
C;Species: Ceratodon purpureus
C;Date: 13-Jan-1996 #sequence_revision 01-Mar-1996 #text_change 31-Oct-1997
C;Accession: S58129
R;Hughes, J.; Mittmann, F.
Submitted to the EMBL Data Library, July 1995
A;Description: The moss Ceratodon purpureus contains and expresses a second, conventional A;Reference number: S58129
A;Accession: S58129
A;Accession: S58129
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S58129
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A;Molecule type: DNA
A;Residues: 1-17 <HUG>
A;Cross-references: GB:U56698; EMBL:X89725; NID:g1314836; PID:g1322246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
B43594
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Best Local Similarity 5/...
""" ches 4; Conservative
                                                                                                                                                                               Query Match 22.5%;
Best Local Similarity 33.3%;
Matches 4; Conservative :
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Best Local Similarity 40.0
Matches 4; Conservative
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11 LGRLYFG 17
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                                                                                                  SGDGTITFTGKV 13
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                                                                                                                                                                                                  Score 23; DB 2;
Pred. No. 2e+03;
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Pred. No. 1.7e+03;
2; Mismatches 1; Indels
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immunodeficiency virus type 1, HIV-1 gp120 - human (fragments)
C;Species: Homo sapiens (man)
C;Date: 28-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 17-Mar-1999
C;Accession: S65399
R;Niwa, Y; Yano, M; Futaki, S.; Okumura, Y.; Kido, H.
Bur, J. Biochem. 237, 64-70, 1996
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C;Keywords: hydrolase; )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transaldolase (EC 2.2.1.2) III - yeast (Pichia jadinii) (fragment) C; Species: Pichia jadinii, Candida utilis C; Date: 05-Jun-1987 #sequence_revision 05-Jun-1987 #text_change 30 C; Accession: Al1497 R; Tsolas, O; Sun, S.C. Arch. Biochem. Biophys. 167, 525-533, 1975 A; Title: Isolation of a peptide containing a histidinyl-cysteinyl A; Reference number: Al1497; MUID:75145197 A; A; A; A; Ceession: Al1497; MUID:75145197
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A;Molecule type: protein
A;Residus: 1-10;11-20 <NIW>
C;Superfamily: type E retrovirus env polyprotein
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A;Reference number: S65399; MUID:96203909
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A; Accession: S65399
RESULT 11

$26537

$7-cell receptor beta chain (clone Cw3/HLA2A3) - mouse (fragment)

$7-cell receptor beta chain (clone Cw3/HLA2A3) - mouse (fragment)

$7.Species: Mus musculus (house mouse)

$7.Species: Musculus (house mouse)

$7.Specie
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Best Local Similarity
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Best Local :
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Pred. No.
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Pred. No. 1.3e+03;
1; Mismatches 1;
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Pred. No. 1.8e+05;
1; Mismatches 0
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1.3e+03;
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                                                  Gournier, H.; Barra,
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A, Experimental source: cytolytic C; Superfamily: immunoglobulin V r C; Keywords: T-cell receptor
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A;Accession: S26557
A;Molecule type: mRNA
A;Residues: 1-12 <CAS>
A;Residues: 1-12 <CAS>
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A:Title: Low-molecular-weight peptides of venc A:Reference number: $06445
A:Accession: $10919
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A; Residues: 1-14 <TUI>
C; Superfamily: crabrolin
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A; Residues: 1-14 <MIR>
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R;Miroshnikov, A.I.; Snezhkova, L.G.; Nazimov, I.V.; Reshetova, O.I.; Rozinov, Bioorg. Khim. 7, 1467-1477, 1981
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                                                                                                                                                                                                                                       T cell receptor alpha chain V region (clone 1V alpha 24-1) - human (fragment) C;SpecLes: Homo sapiens (man) C;Date: 04-Sep-1998 #sequence_revision 04-Sep-1998 #text_change 17-Mar-1999 C;Accession: PH1754 R;Porcelli, S:; Vockey, C.E.; Brenner, M.B.; Balk, S.P. J. Exp. Med. 178, 1-16, 1993 J. Exp. Med. 178, 1-16, 1993 J. Title: Analysis of T cell antigen receptor (TCR) expression by human periph
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A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-17 <POR>
C; Superfamily: immunog
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6 GRVEY
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region; immunoglobulin homology
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Pred. No. 1.4e+03
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1.2e+03;
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immunoglobulin

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region;

immunoglobulin homology

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glyceraldehyde-3-phosphate dehydrogenase (EC 1.2.1.12) - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 11-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 07-May-1999
C;Accession: $74147
R;FNLVda, A.; Osawa, T.; Hitomi, K.; Uchida, K.
Arch. Biochem. Biophys. 333, 419-426, 1996
A;Title: 4-Hydroxy-2-nonenal cytotoxicity in renal proximal tubular cells: protein modii
A;Reference number: $74147; MUID:96404942
A;Accession: $74147
A;Molecule type: protein
A;Residues: 1-10 FVIX-
A;Experimental source: LLC-PK1 cells (renal tubular epithelial cells)
A;Experimental source: LLC-PK1 cells (renal tubular epithelial cells)
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A; Residues: 1-15 <TSU>
A; Experimental source: root
C; Keywords: oxidoreductase
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A;Molecule type: protein
A;Residues: 1-10 <VAZ>
C;Keywords: glycoprotein; plasma
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A;Title: Purification of a novel heterodimer from shark (Carcharhinus A;Reference number: A56899; MUID:93092592
A;Accession: B56899
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C;Species: Carcharhinus plumbeus (sandbar shark)
C;Date: 11-Aug-1995 #sequence_revision 11-Aug-1995 #text_change 20-Jun-2000
C;Accession: B56899
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                                                  Query Match
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Pred. No. 6.6e+02;
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C:Species: Mus musculus (house mouse)
C:Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 11-Apr-1995
C;Accession: PH1455
R:Casanova, J.L.; Martinon, F.; Gournier, H.; Barra, C.; Pannetier, C.; Regr
J. Exp. Med. 177, 811-820, 1993
A;Title: T cell receptor selection by and recognition of two class I major ha; Reference number: PH1430; MUID:93171821
A; Mccession: PH1455
A; Molecule type: mRNA
A; Residues: 1-15 <CAS>
A; Experimental source: cytolytic T-lymphocyte
C; Superfamily: Immunoglobulin homology
C; Keywords: receptor; T-cell
                                                       chymotrypsin (EC 3.4.21.1) - edible frog (fragment)
C;Species: Rana esculenta (edible frog)
C;Date: 17-Jul-1994 #sequence_revision 17-Jul-1994 #text_change 07-May-1999
C;Accession: B61333
R;Pies, W; Zwilling, R; Woodbury, R.G.; Neurath, H.
FEBS Lett. 109, 45-49, 1980
A;Title: Amino-terminal amino acid sequences and the evolution of frog (Rana esculent A;Reference number: A61333; MUID:80113255
                                                                                                                                                                                                                                            RESULT
B61333
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A; Residues: I-15 <CAS-
A; Cross-references: EMBL:X60877
A; Experimental source: T lymphocyte
C; Keywords: T-cell receptor
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C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C;Accession: PH0779
A; Molecule type: protein A; Residues: 1-20 <PIE>
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A:Reference number: PH0746; MUID:92078846

A:Accession: PH0779
                                             A; Reference number: A61333; A; Accession: B61333
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Pannetier, C.; Regnault, A.;

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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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PHU0729
PH1455
B61333
S65399
A11497
S26557
S26557
S10390
PH1736
S58129
PH0106
S58129
PA0106
PH152623
S32502
S10876
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PH0775
B56899
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A49887
$02455
$65709
PH1475
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chymotrypsin (EC 3
immunodeficiency v
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ubiquinol--cytochr
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T-cell receptor al
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3 LSGGSA---LGRLHFG 15

Query Match Best Local Similarity 43.8 Matches 7; Conservative Oy 2 VSGERAVMLLGRVKYG 17	PH0775 PH0775 PH0775 T-cell receptor alpha chain (B28) - C; Species: Mus musculus (house mous, C; Date: 17-Jul-1992 #sequence_revis C; Accession: PH0775 R; Casanova, J.L.; Romero, P.; Widma J. Exp. Med. 174, 1371-1383, 1991 A; Title: T cell receptor genes in a allelic exclusion and antigen-speci A; Reference number: PH0746; MUID:92 A; Accession: PH0775 A; Molecule type: mRNA A; Residues: 1-15 < CAS> A; Cross-references: EMEL: X60871 A; Experimental source: T lymphocyte C; Keywords: T-cell receptor	Query Match Best Local Similarity 30.0% Matches 3; Conservative Qy 8 VMLIGRVKYG 17 ::: :: Db 4 ILRIGLLKYG 13	RESULT 1 pH1338 Ig heavy chain DJ region (clone C372-115) - human C:Species: Homo sapiens (man) C:Species: Homo sapiens (man) C:Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 C:Accession: pH1338 R:Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B. J. Exp. Med. 176, 1577-1581, 1992 A:Title: predominance of fetal type DJH joining in A;Reference number: PH1302; MUID:93094761 A;Molecule type: DNA A;Residues: 1-20 <wass-c;keywords: heterotetramer;="" immunoglobulin<="" th=""><th></th><th>30 21 20.6 18 2 31 21 20.6 20 2 32 21 20.6 20 2 33 21 20.6 20 2 34 21 20.6 20 2 35 20 19.6 12 2 36 20 19.6 12 2 37 20 19.6 13 2 38 20 19.6 13 2 39 20 19.6 13 2 39 20 19.6 14 2 40 20 19.6 15 2 41 20 19.6 18 2 42 20 19.6 18 2 43 20 19.6 18 2 44 20 19.6 18 2 44 20 19.6 18 2 45 20 19.6 20 2</th></wass-c;keywords:>		30 21 20.6 18 2 31 21 20.6 20 2 32 21 20.6 20 2 33 21 20.6 20 2 34 21 20.6 20 2 35 20 19.6 12 2 36 20 19.6 12 2 37 20 19.6 13 2 38 20 19.6 13 2 39 20 19.6 13 2 39 20 19.6 14 2 40 20 19.6 15 2 41 20 19.6 18 2 42 20 19.6 18 2 43 20 19.6 18 2 44 20 19.6 18 2 44 20 19.6 18 2 45 20 19.6 20 2
0%; Score 24.5; DB 2; Length 8%; Pred. No. 8.2e+02; 3; Mismatches 3; Indel:	8) - mouse (fragment) mouse) mouse) evision 17-Jul-1992 #text_c evision, C.; Kourilsky, P.; g1 in a series of class I majo pecific repertoire. D:92078846 Cyte	8; Score 25; DB 2; Length 20 8; Pred. No. 9e+02; 5; Mismatches 2; Indels	#text_ A.; Sha	ALIGNMENTS	A39997 E49048 S77991 PH1358 S78419 A61332 PH1635 PS0325 S58866 A30330 S36876 S54272 G42753 A39504 F42762
ength 15; Indels 3; Gaps 1;	_change 30-May-1997 ; Maryanski, J.L. jor histocompatibility comple	20; els 0; Gaps 0;	ent) _change 07-May-1999 ane, S.; Rovera, G. children with B precursor ly		group III allergen T-cell receptor be cytochrome-c oxida Ig heavy chain DJ ribosomal protein Na+/K+-exchanging Ig H chain V-D-J r glyceraldehyde-3-p tetrahydroberberin botulinum neurotox neuropeptide pep aquacobalamin redu CTC 75 protein - h interferon alpha (octamer-binding pr multicatalytic end

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COMPUTER: ISM PS/2 Model 502 or 558X
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488,379
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION NUMBER: 08/077,255
FILING DATE: June 15, 1993
APPLICATION NUMBER: 07/925,460
FILING DATE: June 15, 1993
APPLICATION NUMBER: 07/925,460
FILING DATE: June 15, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 00246/168001
TELECOMMUNICATION INFORMATION:
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SED ID NO: 76:
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Search completed: December 21, 2000, 08:31:47 Job time: 370 sec
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                                                                                                                                                                                                                                          ; STRANDEDNESS: ; TOPOLOGY: linear US-08-488-379-76
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US-08-488-379-76
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Patent No. 5880103
GENERAL INFORMATION:
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Best Local Similarity 62.9
Matches 5; Conservative
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Lawrence J. Stern
APPLICANT: Jack L. Strominger
TITLE OF INVENTION: IMMUNOMODULATORY PEPTIDES
NUMBER OF SEQUENCES: 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Robert G. Urban
APPLICANT: Roman M. Chicz
APPLICANT: Dario A. A. Vignali
APPLICANT: Mary L. Hedley
                                                                                  12 GRVKYGLH 19
||:|| |:
8 GRIKYTLN 15
                                                                                                                                                                                                                                                                                          TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
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                                                                                                                                                     Similarity 62.5; Conservative
                                                                                                                                                                     28.4%;
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Pred. No. 53;
2; Mismatches
                                                                                                                                                    Score 29; DB;
Pred. No. 53;
2; Mismatches
                                                                                                                                                                                       2;
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                                                                                                                                                                                   Length 16;
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Best Local Similarity
Watches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 77, Applicat GENERAL INFORMATION:
                                                                                                                           COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION UNMBER: PCT/US93/07545
FILING DATE: 19930811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 514

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/077,255

FILING DATE: June 15, 1993
APPLICATION NUMBER: 07/925,460
FILING DATE: August 11, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00246/168001
TELECOMMUNICATION INFORMATION:
TELEFAX: (617) 542-8906
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Lawrence J. Stern
APPLICANT: Jack L. Strominger
TITLE OF INVENTION: IMMUNMODULATORY PEPTIDES
NUMBER OF SEQUENCES: 273
CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richardson
                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/925,41
FILING DATE: August 11, 1992
ATTORNEY/ACENT INFORMATION:
NAME: Clark, Paul T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CORRENT APPLICATION DATA:
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REGISTRATION NUMBER:
                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                  STATE:
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                                                                                                                                                                                                                                                                                                                                  Boston
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                                                                                                                                                                                                                                                                                                                                                 225 Franklin Street
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Dario A. A. Vignali
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mary L. Hedley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Robert G. Urban
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                                                                       07/925,460
 30,162
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Pred. No. 49;
2; Mismatches
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49;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 62.9
Matches 5; Conservative
                                                                                               FILING DATE: August 11, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00246,
TELECOMMUNICATION INFORMATION:
TELEPAN: (617) 542-8906
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (617) 542-890
TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                  TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/077,255
FILING DATE: June 15, 1993
APPLICATION NUMBER: 07/925,460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lawrence J. Stern
APPLICANT: Jack L. Strominger
TITLE OF INVENTION: IMMUNOMODULATORY PEPTIDES
NUMBER OF SEQUENCES: 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 225 F
CITY: Boston
STATE: Massac
                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/480,190 FILING DATE:
STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12 GRVKYGLH 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS:
                TYPE: amino acid
                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 424
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                                   ENGTH:
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Dario A. A. Vignali
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                                                                                                                                                           00246/168001
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Query Match
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Best Local Similarity
""trhes 5; Conserv
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                                                                                          RESULT 11
US-08-480-190-77
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                                           Sequence 77, Application US/08480190 Patent No. 5827516 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (512) 418-30
TELEFAX: (512) 474-7577
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: Highlander, Steven L.
REGISTRATION NUMBER: 37,642
REFERENCE/DOCKET NUMBER: ARCD:112/HYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
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TITLE OF INVENTION: AND METHODS
NUMBER OF SEQUENCES: 44
                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
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                              APPLICANT:
 APPLICANT:
                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/159,340A FILING DATE: 24-NOV-1993 CLASSIFICATION: 435
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                                                                                                                                                                                     14 VKYGLHN 20
                                                                                                                                                                                                                                                                                                                                      LENGTH: 14 amino acids
TYPE: amino acid
STRANGENESS: single
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STATE: Texas
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Roman M. Chicz
Dario A. A. Vignali
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                              Robert G. Urban
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71.4%;
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US-08-488-379-77; A
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/077,255
FILLING DATE: June 15, 1993
APPLICATION NUMBER: 07/925,460
FILING DATE: August 11, 1992
FILING DATE: August 11, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00246/16
REFERENCE/DOCKET NUMBER: 00246/16
REFERENCE/DOCKET NUMBER: 070246/16
REFERENCE/DOCKET NUMBER: 0702
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Best Local S
Matches 5
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GENERAL INFORMATION:
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ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                           APPLICANT: Robert G. Urban
APPLICANT: Roman M. Chicz
APPLICANT: Dario A. A. Vignali
APPLICANT: Mary L. Hedley
APPLICANT: Lawrence J. Stern
APPLICANT: Jack L. Strominger
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
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                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                                          APPLICANT: Jack L. Strominger TITLE OF INVENTION: IMMUNOMODINUMBER OF SEQUENCES: 274
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COMPUTER READABLE FORM:
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                                STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
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                                                                                                                                     CITY:
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                                                                                                                                                                     225 Franklin Street
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Pred. No.
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Mismatches
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Best Local Similarity
Tatches 8; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/077,255
FILING DATE: June 15, 1993
APPLICATION UNBER: 07/925,460
FILING DATE: August 11, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REGISTRATION NUMBER: 00246/168001
TELEPHONE: (617) 542-8906
TELEPHONE: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                         sequence 53, Application PC/TUS9307545 GENERAL INFORMATION:
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TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                           COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 558X
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
                                                                                                                                                                                                                   APPLICANY: Lawrence J. Stern
APPLICANY: Jack L. Strominger
TITLE OF INVENTION: IMMUNONODULATORY PEPTIDES
NUMBER OF SEQUENCES: 273
CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richardson
ADDRESSEE: Fish & Richardson
               CURRENT APPLICATION DATA: APPLICATION NUMBER: PC
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
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PRIOR APPLICATION DATA:
                                                                                                                                         COUNTRY: U.S.A. ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                CITY: Boston
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Dario A. A. Vignali
Mary L. Hedley
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               PCT/US93/07545
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Pred. No.
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Best Local Similarity 61.5
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 07/925,460
FILING DATE: August 11, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REGISTRATION NUMBER: 00246/1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (617) 542-891
TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                TELEFAX: (312) 616-546
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                        FILING DATE: October 2,
ATTORNEY/AGENT INFORMATION:
NAME: Gamson, Edward G.
REGISTRATION NUMBER: 29,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                  CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/769,621
                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/164,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Ghadiri, M. Reza
TITLE OF INVENTION: Isolated Metallopolypeptides:
TITLE OF INVENTION: Compositions and Synthetic Methods
                                                                                     TELEPHONE: (312) 616-5400
                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER:
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                           FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Milnamow,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Dressler, Goldsmith, Shore, Sutker
               ENGTH:
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                                                                      (312) 616-5460
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Pred. No. 45;
0; Mismatches
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PCT-US96-09303-21
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PCT-US96-09303-21
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Best Local Similarity 61.5%;
Matches 8; Conservative
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TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                      FILING DATE: 07-JUN-19
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: IMMUNOGENIC PEPTIDES OF PROSTATE TITLE OF INVENTION: SPECIFIC ANTIGEN
NUMBER OF SEQUENCES: 22
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
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REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00246/168001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07545
FILING DATE: 19930811
                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 07/925,460 FILING DATE: August 11, 1992 ATTORNEY/AGENT INFORMATION:
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                                                 10 RSVILLGR 17
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TOPOLOGY: li
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RESULT 7
US-08-488-379-53
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Best Local Similarity
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                                                                                                                                                                          Patent No.
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GENERAL INFORMATION:
                                                                                                                                                                                           Sequence 53,
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              GENERAL INFORMATION:
APPLICANT: Robert G. Urban
APPLICANT: Roman M. Chicz
APPLICANT: Dario A. A. Vignali
APPLICANT: Mary L. Hedley
APPLICANT: Lawrence J. Stern
APPLICANT: Jack L. Strominger
TITLE OF INVENTION: IMMUNOMODULATORY PEPTIDES
NUMBER OF SEQUENCES: 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 08/077,255
FILING DATE: June 15, 1993
APPLICATION NUMBER: 07/925,460
FILING DATE: August 11, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00246/168001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPAX: (617) 542-5070
TELEPAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 53:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
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ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Lawrence J. Stern
APPLICANT: Jack L. Strominger
TITLE OF INVENTION: IMMUNOMODULATORY PEPTIDES
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LENGTH: 20
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PRIOR APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
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TOPOLOGY: li
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STREET: 225 Franklin Street
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Dario A. A. Vignali
Mary L. Hedley
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US-08-488-379-21
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Best Local Similarity
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US-08-480-190-21
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                                                                                                Sequence 21, Application US/08488379 Patent No. 5880103 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21, Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,190
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/077,255

FILING DATE: JUNE 15, 1993

APPLICATION NUMBER: 07/925,460

FILING DATE: August 11, 1992

ATTORNEY/AGENT INFORMATION:
NAME: CLAIK, PAUL T.
RECISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00246/16

TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 200154
INFORMATION FOR SEQ ID NO:
       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Lawrence J. Stern
APPLICANT: Jack L. Strominger
TITLE OF INVENTION: IMMUNOMODULATORY PEPTIDES
NUMBER OF SEQUENCES: 274
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid STRANDEDNESS:
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     Robert G. Urban
Roman M. Chicz
Dario A. A. Vignali
Mary L. Hedley
Lawrence J. Stern
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225 Franklin Street
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Dario A. A. Vignali
Mary L. Hedley
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Pred. No. 42;
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PCT-US93-07545-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TOPOLOGY: US-08-488-379-21
                                                                                                                                                                                                                                                                                                                                                      Sequence 21, Application PC/TUS9307545 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 29.4%;
Best Local Similarity 61.5%;
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 514

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/077,255

FILING DATE: June 15, 1993

APPLICATION NUMBER: 07/925,460

FILING DATE: August 11, 1992

ATTORNEY/AGENT INFORMATION:

NAME: CLark, Paul T.

RECISTRATION NUMBER: 30,162

REFERENCE/DOCKET NUMBER: 00246/1

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 542-5070

TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (617) 542-89
TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                 APPLICANT:
COMPUTER READABLE FORM:
MEDIDI TYPE: 3.5° Diskette, 1.44 Mb
MEDIDER: IBM PS/2 Model 50Z or 555X
COMPUTER: IBM PS/2 MOSel 50Z or 555X
OPERATING SYSTEM: MS-DOS (Version 5.0)
                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                               APPLICANT: Lawrence J. Stern
APPLICANT: Jack L. Strominger
TITLE OF INVENTION: IMMUNOMODULATORY PEPTIDES
NUMBER OF SEQUENCES: 273
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488,379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Jack L. Strominger
TITLE OF INVENTION: IMMUNOMODI
NUMBER OF SEQUENCES: 274
CORRESPONDENCE ADDRESS:
                                                                         CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
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CITY: Boston
STATE: Massachusetts
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Dario A. A. Vignali
Mary L. Hedley
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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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Maximum DB
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Perfect score:
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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 Issued_Patents_AA:*
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/cgn2_6/ptodata/2/iaa/6_COMB.pep:*
/cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/2/iaa/backfiles1.pep:*
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US-08-164-618-20
US-08-159-340A-17
US-08-480-190-77
US-08-480-190-77
US-08-480-190-76
US-08-480-190-76
US-08-480-190-190
US-08-480-190-192
US-08-480-190-74
US-08-480-190-75
US-08-480-190-191
US-08-480-190-191
US-08-480-190-191
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US-08-480-190-21
US-08-488-379-21
US-08-488-379-21
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            Sequence 21, Appl
Sequence 53, Appl
Sequence 53, Appl
Sequence 20, Appl
Sequence 77, Appl
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Sequence 71, Appl
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Sequence 72, Appl
Sequence 73, Appl
Sequence 74, Appl
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Sequence 77, Appl
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Sequence 72, Appl
Sequence 73, Appl
Sequence 74, Appl
Sequence 75, Appl
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US-07-894-212A-3	US-08-218-025A-8	US-08-792-832A-34	US-08-933-843-60	US-08-934-224-60	US-09-231-797-60	US-08-532-818-60	US-09-207-621-60	US-08-933-402-60	US-08-934-222-60	US-08-792-832A-40	PCT-US93-06751-102	PCT-US93-07545-193	US-08-488-379-193	US-08-480-190-193	US-08-625-691-1	PCT-US93-07545-191
Sequence 3, Appli	œ	Sequence 34, Appl	Sequence 60, Appl				•			Sequence 40, Appl	Sequence 102, App		Sequence 193, App		Sequence 1, Appli	Sequence 191, App

ALIGNMENTS

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RESULT 1
US-08-472-228A-21
; Sequence 21, Ap
                                                                                  ; TOPOLOGY: li
; MOLECULE TYPE:
US-08-472-228A-21
Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                 CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Highlander. Steven L.
REGISTRATION NUMBER: 37,642
REFERENCE/DOCKET NUMBER: UTSC
TELECOMMUNICATION INFORMATION:
TELEPHONE: (512) 418-3000
TELEFAX: (512) 474-7577
                                                                                                                                                                                                     TELEX: 79-0924
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: KOKOLUS, WILLIAM J
APPLICANT: Fritsche, Herbert
APPLICANT: Johnston, Dennis &
TITLE OF INVENTION: IMMUNOGEN
TITLE OF INVENTION: SPECIFIC
                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                            TYPE: amino acid
TYPE: amino acid
STRANDEDNESS: sing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Houston STATE: Texas
                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/472,228A FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
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o. 5807978
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                                                                                                                                                                 19 amino acids
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   Conservative
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IMMUNOGENIC PEPTIDES
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                 Score 30; DB Pred. No. 42;
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RESULT
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D Q44850
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T 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-NOV-1996 (TrEMBLrel. 01, Last annotation update)
DT HYPOTHETICAL PROTEIN (FRACMENT)
DE HYPOTHETICAL PROTEIN (FRACMENT)
OS BOLTELIA burgdorferi (Lyme disease spirochate)
OC Bacteria; Spirochaetales; Spirochaetaceae; Borrelia.
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ID Q9
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Matches 6; Conserv
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01-MAY-2000 (
                                                                                                                                                                                                                                                                                        Frankland
Submitted
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Homo sapiens (Human).
Homo sapiens (Human).
'--rvota; Metazoa; Chordata; /-
'--rvota; Primates;
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                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                    Submitted (AUG-1999) to the EMBL; AL031429; CAB52457.1;
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01-MAY-2000 (TrEMBLrel. 13,
01-MAY-2000 (TrEMBLrel. 13,
01333A15.2 (PROSTAGLANDIN E
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Last annotation update)
RECEPTOR (EP3E)) (FRAGMENT).
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Pred. No. 1.9e
3; Mismatches
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Catarrhini;
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1.9e+03;
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OC Percom
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RP SEQUEN
RX MEDLIN
RA Malaga
RA Sueltm
RT "Linka
RT Class
RT Class
RT Geneti
DR EMBL;
KW MHC.
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               Search completed: December 21, Job time: 600 sec
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077893;
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01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
MHC CLASS II B LOCUS 10 (FRAGMENT)
MHC CLASS II B LOCUS (Nile tilapia) (Tilapia nilotica).
Creochromis niloticus (Nile tilapia) (Tilapia nilotica).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Acanthopterygii;
7~~~comorpha; Perciformes; Labroidei; Cichlidae; Oreochromis.
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Q9ZYW2;
Q9ZYW2;
Q1-MAY-1999 (TrEMBLrel. 10, Created O1-MAY-1999 (TrEMBLrel. 10, Last se O1-MAY-1999 (TrEMBLrel. 10, Last an CYTOCHROME OXIDASE II (FRAGMENT).
Dolopsidea sp.
Mitochondrion.
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NON_TER 1
SEQUENCE 19 A
                                                                                                                                                                          Malaga-Trillo E., McAndrew B., Vincek V., Zaleska-Rutczynska Sueltmann H., Figueroa F., Klein J.;
"Linkage relationships and haplotype polymorphism among cichl class II B loci.";
Genetics 149:1527-1547(1998).
EMBL; AF050003; AAC41342.1; -.
                                                                                                                                                                  EMBL; AF050003; MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Hymenoptera; Apocrita; Ichneumonoidea; Braconidae; Rhyssalinae; Dolopsidea.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOl. Biol. Evol. 16:298-309(1999).
EMBL; AF034599; AAC79747.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dowton M., Austin A.D.; "Evolutionary dynamics of a mitochondrial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 99152621.
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      Similarity
2; Conserv
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      Conservative
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                                                                                                  1296 MW;
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                       22.0%;
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Pred.
                       Score 24; DB 7;
Pred. No. 1.6e+03;
                                                                                                  68775B73786B572B CRC64;
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No. 1.9e+03;
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01-MAY-2000
01-MAY-2000
01-JUN-2000
                                                                                                                                        Q16045 PRELIMINARY; PRT; 14 AA. Q16045; O1-NOV-1996 (TrEMBLrel. 01, Created) O1-NOV-1996 (TrEMBLrel. 01, Last sequence update) O1-NOV-1998 (TrEMBLrel. 08, Last annotation updat D3 DOPAMINE RECEPTOR (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 9324938/.
Bangert K., Johnsen A.H., Christensen "Different N-terminal forms of alpha;"
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
CYTOCHROME-C REDUCTASE 55 KDA SUBUNIT (EC 1.10.2.2) (FRAGMENT).
Solanum tuberosum (Potato).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence up
01-JUN-2000 (TrEMBLrel. 14, Last annotation
ALPHA 2-PLASMIN INHIBITOR (FRAGMENT).
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Braun H.P., Kruft V., Splanta 193:99-106(1994)
SEQUENCE 17 AA; 1758
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Eukaryota; Viridiplantae; Embry
Magnoliophyta; eudicotyledons;
                                                                                               Homo sapiens (Human Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                plasma.";
Biochem. J.
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Eukaryota; Metazoa; C
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   SEQUENCE FROM N.A
                                                                    Mammalia;
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                                                                 Eutheria;
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19 AA; 2065 MW; 41352BF04D1EEAE9
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Primates; Catarrhini;
                                                                 Primates;
                                                                                               Chordata;
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Pred. No. 1.6e
1; Mismatches
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Pred. No. 1.2e+03;
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                                                             Catarrhini;
                                                                                               Craniata; Vertebrata; Euteleostomi;
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2-plasmin
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RESULT
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MEDLINE; 93084378.

Turbett G.R., Hoj P.B., Horne R., Mee B.J.;

Turbett G.R., Hoj P.B., Horne R., Mee B.J.;

"Purification and characterization of the urea:

"Purification and characterization and animals."

Helicobacter species from humans and animals."

Infect. Immun. 60:5259-5266(1992).

Toficat. Immun. 60:5259-5266(1992).
                                                                                                                                                                                                                                                                          Q9UC87 PRELIMINARY; PRT; 18 AA.
Q9UC87;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation updat)
01-JUN-2000 (TREMBLREL. 14, Last annotation updat)
01-JUN-2000 (TREMBLREL. 14, Last annotation updat)
01-JUN-2000 (TREMBLREL. 14)
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"Expression of the D3 dopamine receptor gene and a novel variant transcript generated by alternative splicing in human peripheral blood lymphocytes.";
Biochem. Biophys. Res. Commun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               O9R5F6 PRELIMINARY; PRT; 18 AA. 09R5F6; 01-MAY-2000 (TrEMBLrel. 13, Created) 01-MAY-2000 (TrEMBLrel. 13, Last sequence up 01-JUN-2000 (TrEMBLrel. 14, Last annotation
                                   MEDLINE; 95177668.

Rao C.N., Liu Y.Y., Peavey C.L., Woodley D.T.;
"Novel extracellular matrix-associated serine
from human skin fibroblasts.";
"17.311.314/1995)
                                                                                                                                                                                              Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UREASE SMALL SUBUNIT (FRAGMENT).
Helicobacter mustelae.
Bacteria; Proteobacteria; epsilon subdivision; Helicobacter group;
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  SEQUENCE
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  Biochem. Biophys. 317
NCE 18 AA; 1968 MW;
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4; Conserv
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MEDLINE; 9533700,
MEDLINE; 9533700,
Thulin C.D., Walsh K.A.;
Thulin C.D., Walsh K.A.;
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01-MAY-2000
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01-MAY-2000
                                                        EMBL; AI
                                                                                                                                                                                     SEQUENCE FROM N.A.
STRAIN-EGYPTIAN;
Hamdan F.F., Ribeiro P.;
                                                                                                                                                                                                                                                                                                                                                                                          Schistosoma mansoni (Blood fluke).
Eukaryota; Metazoa; Platyhelminthes;
Schistosomatoidea; Schistosomatidae;
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          SEQUENCE · 14
                                                              Submitted (JUN-1997) to the EMBL; AF006679; AAC62255.1; NON_TER 14
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SEQUENCE 9 AA; 1099 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lepisosteus osseus (Long-nosed gar), and Amia calva (Bowfin). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleost Actinopterygii; Neopterygii; Semionotiformes; Lepisosteidae;
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P SEQUENCE.

P SEQUENCE.

X MEDLINE; 95020803.

AN YOKOta K., Hiral Y., Haque M., Hayashi S., Isogai H., Suy-
RA Nagamachi E., Tsukada Y., Fujii N., Oguma K.;

RT "Heat shock protein produced by Helicobacter pylori.";

RL Microbiol. Immunol. 38:403-405(1994).

RL Microbiol. Immunol. 38:403-405(1994).

RR PRAM; PP00547; urease_gamma; 1.

CO SEQUENCE 20 AA; 2302 MW; 29C9DFBFD6D21805 CRC64;
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Q1-NOV-1999
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Q1-MAY-2000
Q1-JUN-2000
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SEQUENCE
                                                                                                                                                                                                              SEQUENCE FROM N.A.

Urbach E., Chisholm S.W.;

"Genetic diversity in Prochlorococcus sorted from the Sargasso Sea and Gulf Limnol. Oceanog. 43:1615-1630(1998).

EMBL; AF070176; AAD20791.1; -.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TREMBLrel. 14, Last annotation update)
30 KDA MAJOR HEAT SHOCK PROTEIN (FRAGMENT).
Helicobacter pylori (Campylobacter pylori).
Bacteria; Proteobacteria; epsilon subdivision; Heli
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Copyright (c) 1993 - 2000 Compugen
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O16045 homo sapien
O9r5f6 helicobacte
O9uc87 homo sapien
Q44850 borrelia bu
O9uji8 homo sapien
O77893 oreochromis
O12078 caprine art
O12076 caprine art
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Q9uc71 homo sapien
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Q18502 schistosoma
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DT 0
OC F
OC M
                                                                                                                                               RESULT
                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 4; Conserv
                                                                                                                                                                                                                                                                                                                      MEDLINE; 94039817.
Conlon J.M., Olson K.R.;
Conlon of a vasoactive p
"Purification of a vasoactive p
trout plasma.";
FEBS Lett. 334:75-78(1993).
SEQUENCE 10 AA; 1193 MW; 33
                                          O9UC71 PRELIMINARY;
O9UC71;
01-WAY-2000 (TrEMBLrel. 1
01-MAY-2000 (TrEMBLrel. 1
01-JUN-2000 (TrEMBLrel. 1
FILAGGRIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           O9PRZ1
O9PRZ1
O1PRZ1;
O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
O1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
UYSYL-BRADYKININ-VASOACTIVE PEPTIDE KALLIDIN HOMOLOGIO
                                                                                                                                                                                                                                                                                                                                                                                                                                     Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
Homo sapiens (Human)
Eukaryota; Metazoa; Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE.
                                                                                                                                                                                         :| |||
1 KRPPGW 6
                                                                                                                                                                                                                     8 EREPGW 13
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   Primates;
                Chordata;
                                                                                                                                                                                                                                                                 26.6%;
66.7%;
                                                         13,
13,
                                                         Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                   1;
                                                                                       Created)
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Pred. No. 2.4e+02;
1; Mismatches 1
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                                                                                                                     PRT;
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 Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                   related to lysyl-bradykinin from
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Search completed: December 21, 2000, 08:32:56 Job time: 439 sec

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RESULT 14
CXET_CONTE
ID CXET_C
AC P81755
DT 30-MAY
DT 01-OCT
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Best Local S
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Matches 3
                           CXET_CONTE
P81755;
30-MAY-2000
                                                                                                                                                                                                                                                                                                  STRAIN=63;
MEDLINE; 960
Schach S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hormone;
MOD_RES
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                      schach S., Tshisuaka B., Fetzner S., Lingens "Quinolline 2-oxidoreductase and 2-oxo-1,2-dit dioxygenase from Comamonas testosteroni 63. T quinolline and 3-methylquinolline degradation."
                                                                                                                                                                                                                                                                                                                                                            01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-FEB-1996 (Rel. 33, Last annotation update)
0UINOLINE 2-OXIDOREDUCTASE, GAMMA CHAIN (EC 1.-.-.) (FRAGMENT).
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01-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                       Comamonas
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                                                                                                                                                                                         Oxidoreductase; Flavoprotein;
                                                                                                                                                                                                                                             -i- FUNCTION: CONVERTS (3-METHYL-)-QUINOLINE TO 1,2-DIHYDROQUINOLINE.
                                                                                                                                                                                                                                                                                                                                               Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INTERPRO;
 EPSILON-CONOTOXIN
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                                                                                                                                                                                                          (3-METHYL-)QUINOLINE.
SUBUNIT: HETEROHEXAMER OF TWO
                                                                                                                                                                                                  TWO GAMMA CHAINS (PROBABLE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GWL 14
                                                                                                          LQGEREP
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                                                                                         IQAEKNP
                                                                                                                           Similarity
3; Conserv
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                                                                                                                                                                                                                                                                Biochem. 232:536-544(1995)
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                                                                                                                                                                                                                                                                                                                                                       testosteroni (Pseudomonas testosteroni)
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(Rel.
(Rel.
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                                             STANDARD;
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 39, C
39, I
40, I
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100.0%;
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42
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Last
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                                                                                                                                                                                                                                                                                                                                              beta subdivision; Comamonadaceae; Comamonas
          annotation
                 sequence
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                                                                                                                           Score 21; DB
Pred. No. 9.86
2; Mismatches
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Pred. No.
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284B32337871F5A3 CRC64;
                                                                                                                                                                       C848CE64433B1DC6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PYRROLIDONE CARBOXYLIC
                                                                                                                                                                                         FAD;
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                                                                                                                                                                                                                            DEGRADATION OF QUINOLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                           ALPHA CHAINS,
                                                                                                                                                                                        Molybdenum
        npdate)
on update)
                                                                                                                    DB 1,
9.8e+02;
2;
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3. 9.8e+02;
0;
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                                                                     Query Match
Best Local S
Matches 4
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Best Local S
Matches
                                                                                                                                                             Neuropeptide;
MOD_RES 1
SEQUENCE 13
                                                                                                                                                                                                                                                                                                                                                                                                        FARB_ASCSU STANDARD: PRT; 13 AA. P43173; P43173; O1-NOV-1995 (Rel. 32, Created) O1-NOV-1995 (Rel. 32, Last sequence update) O1-FEB-1996 (Rel. 33, Last annotation update) FMRFAMIDE-LIKE NEUROPEPTIDE AFI. AScaris lumbrice Ascaris Newstation, Newsta
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DISULFID
MOD_RES
MOD_RES
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MOD_RES
CARBOHYD
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"A conotoxin from Conus textile with unusual posttranslational modifications reduces presynaptic Ca2+ influx.";
Proc. Natl. Acad. Sci. U.S.A. 96:5758-5763(1999).
-1- FUNCTION: CONOTOXIN WHICH ACTS AT PRESYNAPTIC MEMBRANES, B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ASCSU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rigby A.C., Lucas-Meunier Dahlqvist I., Fossier P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Neogastropoda;
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conus textile (Cloth-of-gold cone). Eukaryota; Metazoa; Mollusca; Gastr
                                                                                                                                                                                                                                      Peptides 16:491-500(1995).
                                                                                                                                                                                                                                                                             Ascaris suum.
                                                                                                                                                                                                                                                                                            Cowden C., Stretton A.O.W.;
"Eight novel FMRFamide-like
                                                                                                                                                                                                                                                                                                                                   MEDLINE;
                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                           Ascarididae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Presynaptic neurotoxin;
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4 GISEPNFLR
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                                  GEREPGWLK
                                                                     4; Conserv
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3; Conservative
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                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                           Ascaris
                                                                                                                                                                 AA;
                                                                                                                                                                                                    Amidation.
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12
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75.0%;
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Glycoprotein;
                                                                     Score 21; DB
Pred. No. 1.3e
2; Mismatches
                                                                                                                                                                                                                                                                                              neuropeptides
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Pred. No. 1.3e+03;
0; Mismatches 1
                                                                       2;
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O-LINKED (GALNAC.
386C9E1C74AFA378
                                                                                                                                                               AMIDATION.
9CAEC650D6886B05 CRC64;
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Roepstorff P., Ba
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                                                                                                         Length
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a J.D.,
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Bromination;
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HPA1_RANES
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Best Local S
Matches 5
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Best Local Similarity
Matches 4; Conserv
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P13724;
01-JAN-1990
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P32415;
01-OCT-1993
MEDLINE: 88063566.

Iwabuchi H., Komori S., Ohashi H., Kimura S.;

"The amino acid sequence of a smooth muscle-contracting chicken rectum. Identity to chicken neurotensin.";

Jpn. J. Pharmacol. 44:455-459(1987).
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NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-1993 (Rel. 27, Created)
01-OCT-1993 (Rel. 27, Last sequence update)
01-OCT-1993 (Rel. 27, Last annotation update)
11-OCT-1993 (Rel. 27, Last annotation update)
11-OCT-1993 (Rel. 27, Last annotation update)
11-OCT-1993 (Rel. 27, Last sequence update)
11-OCT-1993 (Rel. 27, Created)
12-OCT-1993 (Rel. 27, Created)
13-OCT-1993 (Rel. 27, Created)
13-OCT-1993 (Rel. 27, Created)
14-OCT-1993 (Rel. 27, Created)
13-OCT-1993 (Rel. 27, Last sequence update)
14-OCT-1993 (Rel. 27, Last sequence update)
14-OCT-1993 (Rel. 27, Last sequence update)
14-OCT-1993 (Rel. 27, Last sequence update)
15-OCT-1993 (Rel. 27, Last sequence update)
16-OCT-1993 (R
                                                                                                                                                                                                                     Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasiani
                                                                                                                                                                                                                                                                                                                 01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequ
01-NOV-1995 (Rel. 32, Last anno
NEUROTENSIN (NT).
                                                                                                                                                  SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHICK
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Barra D., Bossa F.;
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MOD_RES
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Amphibian skin; Amidation; Hemolysis MOD_RES 13 13 AMIDATIONON_TER 13 13
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1 QZKRPPGF 8
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5; Conserv
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Pred.
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9e+02;
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RESULT
GORNALD
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                                                                                                                                                     GONL_SQUAC STANDARD; PRT;
ID GONL_SQUAC STANDARD; PRT;
AC P27429;
DT 01-AUG-1992 (Rel. 23, Created)
DT 01-AUG-1992 (Rel. 23, Last sequence up
DT 15-DEC-1998 (Rel. 37, Last annotation
DE GONADDLIBERIN (GONADOTROPIN-RELEASING
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MOD_RES
SEQUENCE 1
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MOD_RES
MOD_RES
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RH III) (LULIBERIN III).

Oncoribynchus keta (Chum salmon).

Eukaryota; Metazoa; Chordata; Craniata; Vertebra
Actinopterygii; Neopterygii; Teleostel; Euteleos
Actinopterygii; Salmoniformes; Salmonidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ONCKE
TISSUE=BRAIN;
MEDLINE; 92335300
                                        SEQUENCE
                                                                                              Squalus acanthias (Spiny dogfish). Eukaryota; Metazoa; Chordata; Cran
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- FUNCTION: SMOOTH MUSCLE-CONTRACTING PIR; A28505; A28505.
                                                                             Elasmobranchii;
                                                                                                                                        (LULIBERIN)
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4; Conserv
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                                                                           Squalea;
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                                                                         data; Craniata; Vertebrata; Chondrichthyes;
Squaloidei; Squalidae; Squalus.
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Pred. No.
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Pred.
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284B3233786B45A3 CRC64;
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9.8e+
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Euteleostei;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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Best Local
Matches
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01-NOV-1995 (Rel. 3
30-MAY-2000 (Rel. 3
3-DEHYDROQUINATE DI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1995
01-NOV-1995
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LT 6
                                                                                                  3-dehydroquinate dehydratase from Amycolatopsis methanolica.";
J. Gen. Microbiol. 138:2449-2457(1992).
J. FUNCTION: CATALYZE A TRANS-DEHYDATION VIA AN ENOLATE
INTERNEDIATE. IS INVOLVED IN BOTH THE CATABOLISM OF QUINATE
THE BIOSYNTHESIS OF AROMATIC AMINO ACIDS. HAS A TEMPERATURE
OPTIMAL OF 76 DEGREES CELSIUS AND PH OPTIMAL OF 9.0. TYPE II
ENZYMES ARE THERMOSTABLE.

-I- CATALYTIC ACTULTY: 3-DEHYDROQUINATE = 3-DEHYDROSHIKIMATE +
-I- PATHWAY: THIRD STEP IN THE BIOSYNTHESIS OF CHORISMATE WITHIN
THE BIOSYNTHESIS OF AROMATIC AMINO ACIDS (THE SHIKIMATE PATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOD_RES
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 90046758
Jaffe H., Raina A
Vogel V.W., Zhang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE.
TISSUE=CORPORA CARDIACA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota;
Pterygota;
                      INTERPRO; PROSITE; F
                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=NCIB 11946;
MEDLINE; 93123995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bacteria; Firmicutes;
Actinomycetales; Pseu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Neuropeptide;
MOD_RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PIR; B33995; B33995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypotrehalosemic activity isolated from flies (Diptera).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jaffe H., Raina A.K., Riley C.1
Vogel V.W., Zhang Y.-S., Hayes
"Primary structure of two neuro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tabanidae;
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                                                              -!- SUBUNIT: HOMODODECAMER.
                                                                                                                                                                                                                                                                                                                                                                      Euverink G.J.W., Hessels G.I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amycolatopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Amycolatopsis methanolica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P46380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AROQ_AMYME
                                                                                                                                                                                                                                                                                                                                                    Dijkhuizen L.,
                                                                                                                                                                                                                                                                                                                              "Purification and characterization of a dual function
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TYPE II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11 PGW 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C. Nati. Acad. Sci. U.S.A. 86:8161-8164(1989).

FUNCTION: HYPERTREHALOSAEMIC FACTORS ARE NEUROPEPTIDES THAT ELEVEL OF TREHALOSE IN THE HEMOLYMPH (TREHALOSE THE MAJOR CARBOHYDRATE IN THE HEMOLYMPH OF INSECTS).

SIMILARITY: BELONGS TO THE AKH / HRTH / RPCH FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PGW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (Diptera).";
Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
3; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atratus
  metabolism;
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                      PS01029; DEHYDROQUINASE_II;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IPR002047;
                                            IPR001874;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ratus (Horse fly).
Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Neoptera; Endopterygota; Diptera; Brachycera; Tabanomorpha;
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0 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
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. 39, Last annotation update)
DEHYDRATASE (EC 4.2.1.10) (3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             )47; -.
: AKH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FRAGMENT).
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39,
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  Aromatic amino acid biosynthesis; Lyase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .08;
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                                                                 THE TYPE-II 3-DEHYDROQUINASE
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                                                                                                                                                                                                                                                                                                                                                                         Vrijbloed J.W.,
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                          PARTIAL
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                                                                                                       3-DEHYDROSHIKIMATE + H(2)O
S OF CHORISMATE WITHIN
DS (THE SHIKIMATE PATHWAY).
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                                                                                                                                                                                                                                                                                                                                                                         Coggins
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                                                                 FAMILY
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RESULT B
BRK_PARID
ID BRK_P
AC P4271
AC P4271
DT 01-NO
DT 01-NO
DT 01-NO
DT WASPK
OS Parapp
OC Ptery
OC Vespoo
RN (1)
RP SEQUE
RC TISSUE
RA TOK1
RT Parapp
RI Eisei
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                    Parapolybia indica.
Eukaryota; Metazoa; A
Pterygota; Neoptera;
Vespoidea; Vespidae;
                                                                                                                                                                                                                                    BRK_PARID
P42717;
01-NOV-1995
01-NOV-1995
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LLOCMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1994 (Rel. 28, Last sequence upuacc, 01-FEB-1994 (Rel. 32, Last annotation update) (1-NOV-1995 (Rel. 32, Last annotation update) LOCUSTAPYROKININ 1 (LOM-PK-1).

Locusta migratoria (Migratory locust).

Locusta migratoria (Arthropoda; Tracheata; Hexapoda; Insecta Eukaryota; Metazoa; Arthropoda; Orthoptera; Caelifera;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1991
01-FEB-1994
01-NOV-1995
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Schoofs L., Holman G.M., Hayes T.K., Nachman "Isolation, primary structure, and synthesis myotropic peptide of Locusta migratoria."; Gen. Comp. Endocrinol. 81:97-104(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Neuropeptide; Amidation; Pyrokinin.
MOD_RES 1 1 PYROCI
MOD_RES 16 16 ANIDAT
SEQUENCE 16 AA; 1827 MW; A7178B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P20404;
                  TISSUE=VENOM;
Toki T., Yasuhara T., Nakajima T.;
"Isolation and sequential analysis
Parapolybia indica.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-CORPORA CARDIACA;
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                                                                                                  SEQUENCE
                                                                                                                                  Vespoidea;
                                                                                                                                                                                                                      WASPKININ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 91224474.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Acridomorpha; Acridoidea; Acrididae; Locusta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NTERPRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15 GKREP
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SIMILARITY: BELONGS
:; A49761; A49761.
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                                                                                                                                                                                                                                                                                                                                                                                                                    GWPQQPF
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  39:105-111(1988).
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A7178BBDCA0AFDD6
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7.9e+02;
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P08939;
01-NOV-1988
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SEQUENCE
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MOD_RES
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Pandalus borealis (Northern red shrimp).

Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca; Eukaryota; Metazoa; Arthropoda; Pleocyemata; Caridea;
                                                                                                                                                                                                                                                                                                                               01-NOV-1988 (Rel. 09, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
01-CCT-2000 (Rel. 40, Last annotation update)
RED PIGMENT CONCENTRATING HORMONE (RPCH)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                              Pandalus borealis.";

Pandalus borealis.";

Pandalus borealis.";

Pandalus Biophys. Acta 371:304-311(1974).

Pandalus Biophys. Acta 371:304-311(1974).

STIMULATING CONCENTRATION OF THE PIGMENT
                                                                                                                                                                                                                                                                     MEDLINE;
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                                                                                                                                                                                                                                                                               SEQUENCE.
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FUNCTION: THIS HORMONE, RELEASED FROM CELLS IN THE CORPORA CARDIACA AFTER THE BEGINNING OF FLIGHT, CAUSES RELEASE OF DIGLYCERIDES FROM THE FAT BODY AND THEN STIMULATES THE FLIGHT MUSCLES TO USE THESE DIGLYCERIDES AS AN ENERGY SOURCE.
SIMILARITY: BELONGS TO THE AKH / HRTH / RPCH FAMILY.
                                                                                                                                                                                      SIMILARITY: BELONGS; S07139;
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Pred. No. 8.8
0; Mismatches
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X Veenstra J.A., Camps F.;

A Veenstra J.A., Camps F.;

A Veenstra J.A., Camps F.;

A Veenstra J.A., Camps F.;

T "Structure of the hypertrehalosemic neuropeptide of the German T cockroach, Blattella germanica.";

I Neuropeptides 15:107-109(1990).

C -1- FUNCTION. HYPERTREHALOSEMIC FACTORS ARE NEUROPEPTIDES THAT ELEVATE THE LEVEL OF TREHALOSE IN THE HEMOLYMPH (TREHALOSE IS THE MAJOR CARBOHYDRATE IN THE HEMOLYMPH OF INSECTS).

C -1- SIMILARITY: BELONGS TO THE AKH / HRTH / RPCH FAMILY.

C -1- SIMILARITY: BELONGS TO THE AKH / HRTH / RPCH FAMILY.

R PIR; S08998; S08997.

R PIR; S08998; S08998.

R PIR; S089137; S09137.

R PIR; A60421, A60421.
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Best Local
HTE_TABAT STANDARD,
HTE_TABAT STANDARD,
P14596;
01-JAN-1990 (Rel. 13, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
01-FEB-1994 (Rel. 28, Last annotation update)
01-FEB-1994 (Rel. 28, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                           Neuropeptide;
MOD_RES 1
MOD_RES 1
SEQUENCE 10
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01-JUL-1989
01-FEB-1994
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the corpora cardiaca of the cockroaches Leucophaea maderae, Gromphadorhina portentosa, Blattella germanica and Blatta orientalis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaede G., Rinehart K.L. Jr.;
"Primary structures of hypertrehalosaemic neuropeptides isolated from the corpora cardiaca of the cockroaches Leucophaea maderae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaede G., Rinehart K.L. Jr.;
Amino acid sequence of a hypertrehalosaemic neuropeptide corpus cardiacum of the cockroach, Nauphoeta cinerea.";
Biochem. Biophys. Res. Commun. 141:774-781(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SPECTES=N.CINEREA, TISSUE=CORPORA CARDIACA;
MEDLINE; 87100208.
Gaede G., Rinehart K.L. Jr.;
Tamino acid sequence of a hypertrehalosaemi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nauphoeta cinerea (Cinereous cockroach) (Gray cockroach), Leucophaea maderae (Madeira cockroach), Blattella germanica (German cockroach), and
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01-FEB-1994 (Rel. 28, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
HYPERTREHALOSAEMIC HORMONE (HTH) (HYPERTREHALOSAEMIC NEUROPEPTIDE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atom bombardment mass spectrometry.";
Biol. Chem. Hoppe-Seyler 371:345-354(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and of the stick insect Extatosoma tiaratum assigned atom bombardment mass spectrometry.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPECIES-L.MADERAE, G.PORTENTOSA, MEDLINE; 90253659.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Orthopteroidea; Dictyoptera; Blattaria;
                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
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AMIDATION.
056236786775B9C4 CRC64;
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CAER_LITXA
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C;Superfamily: adipokinetic hormone
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F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;10/Modified site: amidated carboxyl end (Thr) #status experimental
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A;Accession: S09137
A;Molecule type: protein
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A;Title: Primary structures of hypertrehalosaemic neuropeptides
entalis and of the stick insect Extatosoma tiaratum assigned by
A;Reference number: S08995; MUID:90253659
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R;Veenstra, J.A.; Camps, F.
Neuropeptides 15, 107-109, 1990
A;Title: Structure of the hypertrehalosemic neuropeptide of the A;Reference number: A60421; MUID:91179584
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A:Tille: Bovine brain 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase. Evidence A;Reference number: A43405; MUID:92388154
A:Accession: A43405
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A;Molecule type: protein
A;Molecule type: protein
A;Residues: 1-8 </aN>
A;Residues: 1-8 </aN>
C;Superfamily: adipokinetic hormone
C;Keywords: amidated carboxyl end; hormone; neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;8/Modified site: amidated carboxyl end (Trp) #status experimental
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RPCH-related neuropeptide - ferruginous spindle C;Specles: Fusinus ferrugineus (ferruginous spindle) C;Date: 06-Jul-1990 #sequence_revision 06-Jul-1990 #C;Accession: A34626 C;R:Kubota, I.; Fujisawa, Y; I.
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A;Description: involved
C;Keywords: serine prote
                                                                                       C:Keywords: amidated carboxyl end; blocked amino end; hormone; neuropeptide; F:1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental F:8/Modified site: amidated carboxyl end (Trp) #status experimental
                                                                                                                                                                        A; Note: the amino-terminal residue forms pyrrolidone carboxylic acid; therefore, C; Comment: This neuropeptide, isolated from the eyestalks of the shrimp and acti
                                                                                                                                                                                                                                                          Biochim. Biophys. Acta 371, 304-311, 1974
A;Title: Structure of the red-pigment-concentrating hormone of the shrimp, Pandalus A;Reference number: S07139; MUID:75054965
                                                                                                                                                                                                                                                                                                             A; Residues: 1-
R; Fernlund, P.
                                                                                                                                                                                                                                                                                                                            A;Title: Crustacean color-change hormone: A;Reference number: A61348; MUID:72228738 A;Accession: A61348 A;Molecule type: protein A;Residues: 1-8 <FER1>
                                                                                                                                                                                                                                                                                                                                                                                                              R; Fernlund, P.; Josefsson, L. Science 177, 173-175, 1972
                                                                                                                                                                                                                                                                                                                                                                                                                                            N;Alternate names: blanching hormone C;Species: Pandalus borealis (northern shrimp) C;Date: 02-Aug-1994 #sequence_revision 05-Aug-1994 #text_change 07-May-1999 C;Accession: A61348; S07139
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A;Title: A molluscan neuropeptide related to the crustacean hormone,
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R; Jaffe, H.; Raina, A.K.; Riley, C.T.; Fraser, B.A.; Nachman, R.J.; Vogel, V.W.; Zhan Proc. Natl. Acad. Sci. U.S.A. 86, 8161-8164, 1989
A;Title: Primary structure of two neuropeptide hormones with adipokinetic and hypotre A;Reference number: A33995; MUID:90046758
A;Accession: A33995
R;Janssens, M.P.E.; Kellner, R.; Gaede, G.
Biochem. J. 302, 539-543, 1994
A;Title: A novel adipokinetic octapeptide
A;Reference number: S55310; MUID:94379987
                                                                                                                                                                                                                                                                                                                                                                                                                      C;Superfamily: adipokinetic hormone C;Superfamily: adipokinetic hormone; neuropeptide; pyroglutamic acid C;Keywords: amidated carboxyl end; hormone; neuropeptide; pyroglutamic acid F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental F;8/Modified site: amidated carboxyl end (Trp) #status experimental
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A; Title: A novel adipokinetic
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C;Species: Pseudagrion inconspicuum
C;Date: 19-Mar-1997 #sequence_revis
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C;Date: 23-Mar-1990 #sequence_revision 23-Mar-1990 #text_change 31-Oct-1997
                                                                                C; Accession: A58620
                                                                                                 C;Species: Ischnura senegalensis
C;Date: 28-Oct-1997 #sequence_revision
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Biochem. J. 302, 539-543, 1994
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MUID:94379987
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T cell receptor alpha chain V region (clone 3PBL V alpha 24-8) . C;Species: Homo sapiens (man) C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change C;Accession: PH1802
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RyKim, T.

A;Reference number: G09054

A;Reference number: G09054

A;Accession: G02018

A;Status: preliminary; translated from GB/EMBL/DDBJ

A;Molecule type: DNA

A;
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A; Residues: 1-17 < POR>
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                                                                                                                                                                                                                                                                                           R:Porcelli, S.; Yockey, C.E.; Brenner, M.B.;
J. Exp. Med. 178, 1-16, 1993
A:Title: Analysis of T cell antigen receptor
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A;Molecule type: mRNA
A;Residues: 1-15 <POR>
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C;Speciles: Homo sapiens (man)
C;Date: 21-Dec-1996 #sequence_revision 06-Jun-1997 #text_change 22#Jun-1999
C;Accession: G02018
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57.1%;
                                      22.9%;
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71.4%;
                                                                                                                                                                                                                                                   MUID: 93301585
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                                      Score
Pred.
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Pred. No.
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serine proteinase inhibitor, 31K - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 19-Mar-1998 #sequence_revision 17-Apr-1998 #text_change
C;Accession: S71592
R;Rao, C.N.; Liu, Y.Y.; Peavey, C.L.; Woodley, D.T.
Arch. Blochem. Biophys. 317, 311-314, 1995
A;Title: Novel extracellular matrix-associated serine proteinase
A;Reference number: S71592; MUID:95177668
A;Accession: S71592; MUID:95177668
A;Recession: S71592; MUID:95177668
A;Residues: 1-18 <RAO>
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PH1822
T cell
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S71592
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A; Residues: 1-18 <TUR>
A; Residues: 1-18 <TUR>
A; Note: sequence extracted from NCBI backbone (NCBIP:119487)
C; Superfamily: urease 26K chain; urease 11K chain homology; C; Keywords: hydrolase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       urease (EC 3.5.1.5) small chain UreA - Helicobacter mustelae (ATCC 43772) (fragment) C;Species: Helicobacter mustelae C;Date: 19-Dec:193 #sequence_revision 25-Apr:1997 #text_change 30-May-1997 C;Accession: F49215
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A; Status: preliminary
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A;Molecule type: mRNA
A;Residues: 1-17 <POR>
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R;Porcelli, S.; Yockey, C.E.; Brenner, M.B.;
J. Exp. Med. 178, 1-16, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Reference number: PH1754; MUID: 93301585
A; Accession: PH1822
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Pred. No. 8e+02;
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13-Sep-1998

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	GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
OM protein - pro	- protein search, using sw model
Run on:	December 21, 2000, 08:30:04 ; Search time 112.59 Seconds (without alignments) 11.273 Million cell updates/sec
Title: Perfect score: Sequence:	US-08-934-367-6 109 1 LLLHLQGEREPGWLKQLFTN 20
Scoring table:	BLOSUM62 Gapop 10.0 , Gapext 0.5
Searched:	182106 segs, 63460219 residues
Total number of	Total number of hits satisfying chosen parameters: 3930
Minimum DB seq length: 0 Maximum DB seq length: 20	length: 0 length: 20
Post-processing:	Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries
Database :	PIR_65:* 1: pir1:* 2: pir2:* 3: pir3:* 4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARTE

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	œ	7	6	5	44	ω	N	1	NO.	Result	
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A49761	S67975	A47687	S29212	A41668	PT0282	S38976	PH1329	A26228	PD0442	в33995	A26381	808998	S08997	A60421	A43405	A58620	S55310	A33995	A61348	A34626	S71592	F49215	PH1822	PH1802	PH1788	G02018	S39030	рн1790	10	j	
locustapyrokinin -	apolipoprotein Cb2	ά	വ	-7	5	chromogranin A - b	Ig heavy chain DJ	spot 42 protein -	NIPSNAP2 protein -	ש	hypertrehalosemic	hypertrehalosemic	hypertrehalosemic	hypertrehalosemic	6-phosphofructo-2-	adipokinetic hormo	adipokinetic hormo	adipokinetic hormo	red pigment-concen	RPCH-related neuro	eir	urease (EC 3.5.1.5	T cell receptor al	receptor a	receptor		lysyl-bradykinin -	T cell receptor al	Description		

RESULT

ALIGNMENTS

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T cell receptor alpha chain V region (clone 2PBL V alpha 24-6) - human (fragment) C;Species: Homo sapiens (man) C;Species: Homo sapiens (man) C;Date: 16-Jul-1999 **sequence_revision 16-Jul-1999 **text_change 16-Jul-1999 C;Accession: PH1790 C;Accession: PH1790 **Sequence_revision 16-Jul-1999 **Text_change 16-Jul-1999 C;Accession: PH1790 C;Access
                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
$39030
$1930 trout
lysyl-bradykinin - rainbow trout
C.Species: Oncorhynchus mykiss (rainbow trout)
C.Species: Oncorhynchus mykiss (rainbow trout)
C.Date: 19-May-1994 #sequence_revision 19-Apr-1996 #text_change 19-Apr-1996
C.Accession: $39030
R.Conlon, J.M.; Olson, K.R.
FEBS Lett. 334, 75-78, 1993
A.Title: Purification of a vasoactive peptide related to lysyl-bradykinin from trout
A.Reference number: $39030; MUID:94039817
A.Recession: $39030
A.Status: preliminary
A.Rolecule type: protein
A.Residues: 1-10 <CON>
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A;Accession: PH1790
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-16 <POR>
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Best Local Similarity 75.0
Matches 6; Conservative
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Matches 4; Conserv
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1 KRPPGW 6
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PCT-US95-09262-13
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                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION UMBER: 08/372,105
APPLICATION UMBER: 08/372,105
FILING DATE: 13-JAN-95
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/306,473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273,540
APPLICATION NUMBER: 11-JUL-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: A300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/183,222
FILING DATE: 14-JAN-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 15-JUL-
PRIOR APPLICATION DATA:
                                                                                           FEATURE:
                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                    TELEFAX: 31.,
TELEFAX: 25-3856
                                                                                                                                                                                                                                                                                                                                                        NAME: Borun, Michael F. REGISTRATION NUMBER: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08 FILING DATE: 11-MAR-94
             OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                           NAME/KEY: misc_feature
OTHER INFORMATION: "XM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 08, FILING DATE: 15-SEP-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: PCT/US95/09262
                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                     TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
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                                                    LOCATION:
                                                                      NAME/KEY:
                                                                                                                                                                                                                       LENGTH:
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                                                                      Modified-site
                                                                                                                                                                                      linear
                                                    C-Terminus
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15-JUL-93
                                                                                                                                                                   peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                      12-MAR-93
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             /label= Amidation
/note= "The C-Terminus is Amidated"
                                                                                                              "XMP.38"
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; NAME/KEY: Modified-site
; LOCATION: C-Terminus
; OTHER INFORMATION: /label= Amidation
; OTHER INFORMATION: /note= "The C-Terminus
US-08-621-803-227
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 227,
                                                                                                                                                                                                                                                                                                             TELEX: 25-3856
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312,474-6300
TELEFAX: 312,474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/00
APPLICATION NUMBER: US/00
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: BOTUN, Michael F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Better, TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                   OTHER INFORMATION: FEATURE:
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                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                               FEATURE:
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                 12 GWLKQLF 18
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                                                                                                                                                                                                               ATURE:
NAME/KEY: misc_feature
NAME/TON: "XMP.388"
                                                                                                                                                                                                                                                                         TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
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1 GWLIQLF 7
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6300 Sears Tower,
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                                                          Conservative
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                                                                                                                                                                                                                                                           peptide
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85.7%;
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85.7%;
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lower, 233
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Pred. No.
                                                          0;
                                                                      Score 33;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                       27129/33199
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South Wacker Drive
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Search completed: December 21, 2000, 08:31:46 Job time: 369 sec

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; OTHER INFORMATION: "BPI.38"
PCT-US94-02465-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 40, Application PC/TUS9500498 GENERAL INFORMATION:
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Best Local Similarity
Matches 6; Conserv
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TELEX: 910-221-5317
INFORMATION FOR SEQ ID NO: 4
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                          STATE.
COUNTRY: United COUNTRY: United COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER: IBM PC COMPATIBLE
COMPUTER: TWETEM: PC-DOS/MS-DOS
COUNTRY: TO ASSE #1.0,
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                                                                                                                                                                                                                  FILING DATE:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/209,762
                             NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 27129/32415
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                  APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/183,222
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                           SOTTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: AN TITLE OF INVENTION: MAINUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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     TELEFAX: JI.,
TELFAX: JI.,
750
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CITY: Chicago
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FOR SEQ ID NO:
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Pred. No.
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; NAME/KEY: misc_feature
; OTHER INFORMATION: "XM
PCT-US95-00656-40
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Best Local Similarity burners
6; Conservative
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                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 08/207, ...
APPLICATION NUMBER: 08/207, ...
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/183, 222
                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: United States of America
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS: LENGTH: 14 amino acids
                                                  FEATURE:
                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: 312/474-6300
                                                                                                                                                                                                                                                                                        FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Anti-Fungal Materials and Methods NUMBER OF SEQUENCES: 227
CORRESPONDENCE ADDRESS:
                                                                   MOLECULE TYPE:
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                                                                                                                                                                      TELEPHONE: 312/474-0448
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CITY: Chicago
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REFERENCE/DOCKET NUMBER: 27
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OTHER INFORMATION: "XMP.38"
                                                                                 TYPE: amino acid
TOPOLOGY: linear
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amino acid

GY: linear
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                                                                                                                  14 amino acids
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Pred. No.
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Query Match
Best Local Similarity
Matches 6; Conserv

Conservative

32.1%;

Score 35; Pred. No. 0;

DB 4;

Length 14; Indels

Mismatches

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Gaps

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Little II, Roger G

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US-09-119-263-40
; Sequence 40, Application US/09119263
; Patent No. 6054431
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 21-MAR-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/504,841
FILING DATE: 20-JUL-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: McAndrews, Held & Malloy, Ltd
STREET: 500 West Madison Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
              CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                   APPLICANT: Horwitz, Arnold H. APPLICANT: Lambert, Lewis H. APPLICANT: Little, Roger G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 312/707-8889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Anti-Fungal Peptides NUMBER OF SEQUENCES: 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                      TITLE OF INVENTION:
                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: McNicholas, Janet M.
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 11021US02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: C-Terminus
OTHER INFORMATION: /label= Amidation
OTHER INFORMATION: /note= "The C-Terminus is Amidated."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 312/707-9155
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85.7%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                            RESULT 11
                                                                                                                                                                                                                                                                             Sequence 40, Application PC/TUS9402465 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 6; Conserv
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Rin-Laures, Li-Hsien REGISTRATION NUMBER: 33.547 REFERENCE/DOCKET NUMBER: 27. TELECOMMUNICATION INFORMATION: 312/474-6300
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
                                                                                                                                                                                                             TITLE OF INVENTION: TITLE OF INVENTION:
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PRIOR APPLICATION DATA:
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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MOLECULE TYPE:
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
NAME/KEY: misc_feature
"XMP.38"
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TELEPHONE: 312/474-0448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
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                                                                                                              CITY: Chicago
STATE: Illinois
                                                                                               COUNTRY:
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amino acid
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10 South Wacker Drive, Suite 3000
                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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SYSTEM: PC-DOS/MS-DOS
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85.7%;
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Pred. No.
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Query Match
Best Local Similarity
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US-08-621-803-39
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino Type:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENCTH: 14 amino acids
TYPE: amino acid
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TITLE OF INVENTION: Met
TITLE OF INVENTION: FUR
TITLE OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPEAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 22-MAR-199
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                                                                                FEATURE:
                                                                                                                                                MOLECULE TYPE:
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            NAME/KEY: Modified-site LOCATION: C-Terminus OTHER INFORMATION: /labe OTHER INFORMATION: /note
                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                             NAME/KEY: misc_feature
OTHER INFORMATION: "XMP.38"
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OTHER INFORMATION: "BPI.38"
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)GY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   United States of America
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                                                                                                                                                peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides 265
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85.7%;
          /label= Amidation
/note= "The C-Terminus
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Pred. No.
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Query Match

32.1%;

Score 35;

DB 2;

Length 14;

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RESULT 9
US-08-621-259A-13
; Sequence 13, Application US/08621259A
; Patent No. 5858974
; GENERAL INFORMATION:
                                                                                                                                                            Query Match
Best Local Similarity
Thehes 6; Conserv
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                                                                                                                                                                                                                                                  ; NAME/KEY: misc_feature
; OTHER INFORMATION: "BPI.38"
US-08-485-445A-40
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INFORMATION FOR SEQ ID NO:
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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 11018US08/100-224.P4.C1B
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-707-8889
TELEPHONE: 312-707-8889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: MCNICHOLAS, Janet M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
FILING DATE: 11-MAR-PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/08/485,*
APPLICATION DATE:
FILING DATE:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/209,762
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                   TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS
LENGTH: 14 amino acids
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MEDIUM TYPE: Floppy disk
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STATE: Illinois
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OGY: linear
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Suite 3400, 500 West Madison Street
                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
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Biologically Active Peptides from Functional Domains of Bactericidal/
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85.7%;
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Best Local S
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                                                                                                                                                                                                                                                                             Patent No.
                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-715-1000
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FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: McDonnell, John J.
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/306,473A
                                                                                                                                                                               APPLICANT: Little, Roger G.
TITLE OF INVENTION: Biologically Active Peptides from
TITLE OF INVENTION: Functional Domains of Bactericidal/Permeability-Increasing
TITLE OF INVENTION: Protein and Uses Thereof
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CORRESPONDENCE ADDRESS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                              NUMBER OF SEQUENCES: SCORRESPONDENCE ADDRESS
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CITY: Chicago
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les 6; Conserv
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CITY: Chicago
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   amino acid

OGY: linear
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Suite 3000, 10 S. Wacker Drive
                                                                                                            E: Allegretti & Witcoff, Ltd.
10 South Wacker Drive, Suite 3000
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Pred. No.
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Best Local Similarity
Watches 6; Conserve
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Patent No. 5763567
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TELEX: 910-221-5317
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Little, Roge TITLE OF INVENTION: Bio TITLE OF INVENTION: Fun TITLE OF INVENTION: Pro NUMBER OF SEQUENCES: 98 CORRESPONDENCE ADDRESS:
                                                                                                                                       APPLICATION NUMBER: US/08/473,344
FILING DATE: 7-JUN-1995
PRIOR APPLICATION NUMBER: US 08/306,473
FILING DATE: 15-SEP-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acids
TYPOLOGY: lin-
                                                                                                       FILING DATE: 15-SEP-1
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: peptide
                                                                 FILING DATE: 11-MAR-1995
ATTORNEY/AGENT INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: No. 5733872nan, Kevin REGISTRATION NUMBER: 35,303
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               NAME: McDonnell, John J.
REGISTRATION NUMBER: 26,949
REFERENCE/DOCKET NUMBER: 93
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CITY: Chicago
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South Wacker Drive, Suite 3000
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Biologically Active Peptides from
Functional Domains of Bactericidal/Permeability-Increasing
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; OTHER INFORMATION: "XMP.38"
US-08-372-783-40
                                      Query Match
Best Local Similarity
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Best Local Similarity
Matches 6; Conserv
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Patent No. 5
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FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273.540
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA: 08/209,762
APPLICATION UMBER: 08/209,762
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA: 08/183.222
APPLICATION UMBER: 08/183.222
FILING DATE: 14-JAN-1994
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPAX: 312/474-0448
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0
                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
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APPLICANT: Little, Roger G.
TITLE OF INVENTION: Anti-Gran
TITLE OF INVENTION: Materials
                                                                                                                                                                                                              MOLECULE TYPE:
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NAME: Rin-Laures, Li-Hsi
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     12 GWLKQLF 18
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REGISTRATION NUMBER: 33,547
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                                                                                                                                                                                                                             TYPE: amino acid
TOPOLOGY: linear
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85.7%;
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                                                    Score 35; DB Pred. No. 10; 0; Mismatches
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Pred. No.
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                  US-08-306-473A-40; Sequence 40, Application US/08306473A; Patent NO. 555332; GENERAL INFORMATION:
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; OTHER INFORMATION: "XM
US-08-372-105-40
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US-08-372-105-40
                                                                                     RESULT
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Best Local S
Matches 6
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FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION UMBER: 08/273,540
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION UMBER: 08/209,762
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA: 194
PRIOR APPLICATION DATA: 194
PRIOR APPLICATION DATA: 194
APPLICATION UMBER: 08/183,222
FILING DATE: 14-JAN-1994
ATTORNEY/ACENT INFORMATION:
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INFORMATION FOR SEQ ID NO:
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APPLICANT:
APPLICANT:
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MEDIUM TYPE: Floppy disk
COMPUTER: IHM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
APPLICANT: Little, Roger G.
                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE:
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Anti-Fungal Materials and Methods
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CITY: Chicago
STATE: Illinoi
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                                                                                                                                                                      12 GWLKQLF 18
                                                                                                                                                                                                         Local Similarity
les 6; Conserv
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REFERENCE/DOCKET NUMBER: 27129/32415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Rin-Laures, Li-Hsien REGISTRATION NUMBER: 33,54
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                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid TOPOLOGY: linear
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US-08-621-803-229
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ALIGNMENTS

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TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Cohen, Jonathan
APPLICANT: Kung, Ada H.C.
APPLICANT: Lambert, Jr., Lewis H.
APPLICANT: Lambert, Jr., Lewis H.
TITLE OF INVENTION: Method for Treating Gram-Negative Bacterial
TITLE OF INVENTION: Infection by Administration of
TITLE OF INVENTION: Bactericidal/Permeability Increasing
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 08/2:
FILING DATE: 11-JUL-194
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/1
FILING DATE: 22-SEP-1933
FILING DATE: 12-SEP-1933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 32
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
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CITY: (
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                                                                                                                                                                                                                                                              NAME: Sharp, Jeffrey S. - REGISTRATION NUMBER: 31,879
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01-MAY-2000 (TrEMBLrel. 13, Created)
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01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
101-MAY-2000 (TrEMBLrel. 13, Last annotation update)
104-MAY-2000 (TrEMBLREL. 13, Last annotation update)
105-MAY-2000 (TrEMBLREL. 13, Last annotation update)
106-MAY-2000 (TrEMBLREL. 13, Last annotation update)
107-MAY-2000 (TrEMBLREL. 13, Created)
108-MAY-2000 (TrEMBLREL. 13, Created)
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108-MAY-2000 (TrEMBLREL. 13, Last sequence update)
109-MAY-2000 (TrEMBLREL. 13, Last sequence update)
101-MAY-2000 (TrEMBLREL
Stifani S., Barber D.L., Aebersold R., Schneider W.J.;
"The laying hen expresses two different receptor-related proteins.";
J. Biol. Chem. 266:19079-19087(1991).
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SEQUENCE
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01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
CALMODULIN KINASE 2 (FRAGMENT).
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MEDLINE; 92011685.
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Schizosaccharomycetaceae; Schizosaccharomyces.
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1 01-MAY-2000 (TIEMBLEEL. 13, Created)

1 01-MAY-2000 (TIEMBLEEL. 13, Last sequence update)

1 01-UJN-2000 (TIEMBLEEL. 14, Last annotation update)

1 01-UJN-2000 (TIEMBLEEL. 14, Last annotation update)

2 00 CEA and JUNCTION PROTEIN (FRAGMENT).

3 Heliothis virescens (Noctuid moth) (Owlet moth).

3 Heliothis virescens (Noctuid moth) (Owlet moth).

5 Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda

6 Pterygota; Neoptera; Endopterygota; Lepidoptera; G1

6 Noctuoidea; Noctuidae; Heliothinae; Heliothis.
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Q9TTG3;
Q1-MAY-2000
Q1-MAY-2000
Q1-JUN-2000
                                                  NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                        Heliothis virescens gap junctions isolated in the presence and of protease inhibitors.";
Cell Tissue Res. 281:179-186(1995).
SEQUENCE 20 NA. 2022.
                                                                                                 "Gene mapping in Ateles pan
Submitted (OCT-1998) to the
EMBL; AF099175; AAF21849.1;
                                                                                                                                                                                                        01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
GALACTOCEREBROSIDASE (FRAGMENT).
                                                                      INTERPRO; IPRO01286; -. PFAM; PF02057; Glyco_hydro_59; NON_TER 1 1
                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                Mammalia;
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Primates;
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the EMBL/GenBank/DDBJ
Score 25; DB Pred. No. 2.2e 3; Mismatches
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2.2e+03;
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01-MAY-2000 (TrEMBLrel: 13, L
DJ796117.4 (NOVEL PROTEIN SIMI
DJ796117.4.
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Q9TRR6;
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01-MAY-2000 (TrEMBLrel. 13, C;
01-MAY-2000 (TrEMBLrel. 13, L;
01-MAY-2000 (TrEMBLrel. 13, L;
CALCYCLIN-ASSOCIATED PROTEIN,
                                                                                                                                                                                                                                                                     Tokumitsu H., Mizutani A., Minami H., Kobaya
"A calcyclin-associated protein is a newly i
ca2+/phospholipid-binding proteins, annexin
J. Biol. Chem. 267:8919-8924(1992).
SEQUENCE 19 AA; 2018 MW; 9A54062504B8322
                                                                                                                                                                                                                                                                                                                                                                                                                       Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Ve.
Mammalia; Eutheria; Lagomorpha; Leporidae;
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SEQUENCE
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Homo sapiens (Human).
Homo sapiens (Human).
'`~rvota; Metazoa; Chordata;
'`~rvota; Primates;
P70861
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01-MAY-2000
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   PRT;
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MEDLINE; 9312006.

Ge Y. Old I.G., Girons I.S., Charc Ge Y. Old I.G., Girons of Borrel The f1gK motility operon of Borrel Signa 70-like promoter.";
Microbiology 143:1681-1690(1997).
EMBL; U65901; AAB62742.1; -.
NON_TER 21 21 ...
                 O73594 PRELIMINARY;
O73594;
O1-AUG-1998 (TrEMBLrel. 07
O1-AUG-1998 (TrEMBLrel. 07
O1-NOV-1998 (TrEMBLrel. 08
ZAX-2 (FRAGMENT).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chorda
Archosauria; Aves; Neognat
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01-MAY-2000
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01-FEB-1997 (TrEMBLrel.
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AUREIN 5.1.
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Eukaryota; Metazoa; (
Amphibia; Batrachia;
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UENCE 25
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                    Neognathae;
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Chordata; Craniata; Vertebrata; Euteleostomi;
Anura; Neobatrachia; Bufonoidea; Hylidae;
                                     Chordata;
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                    Craniata; Ver 
; Galliformes;
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                    Vertebrata; Euteleostomi;
nes; Phasianidae; Phasianinae;
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O31365;
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Linder D., Freund R., Kadenbach B.;

Linder D., Freund R., Kadenbach B.;

"Species -specific expression of cytochrome c oxidase isozymes:";

Comp. Blochem. Physiol. B, Blochem. Mol. Biol. 112:461-469(1995)

SEQUENCE 24 AA; 2795 MW; D49D27C03B61F803 CRC64;
sequencing.";
                                                                              STRAIN-L2
                                                                                                                                                                                   Chlamydia
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SEQUENCE
                                                                                                          SEQUENCE FROM
                                                                                                                                                             Bacteria;
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                                                                                                                                                                                                                                        ATP-BINDING
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EMBL: U93701; AAC45536.1;
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Tilly K., Casjens
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Mammalia; Eutheria;
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7; Conserv
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Chlamydiales;
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PROTEIN (FRAGMENT).
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PFAM; PF00142; fer4_NifH; 1.
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SEQUENCE 24 AA; 2752 MW;
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Q46081;
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NITROGENASE
                   Urbach E., Chisholm S.W.;
"Genetic diversity in Prochlorococcus sorted from the Sargasso Sea and Gulf Limnol. Oceanog. 43:1615-1630(1998).
EMBL; AF070133; AAD20742.1; -.
NON_TER 21 21
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3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate
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sp_organelle:*
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SUMMARIES

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Search completed: December 21, 2000, 08:40:18	Oy 17 LLVDFLO 23 : Db 13 LLVDVLK 19	Ouery Match Best Local Similarity 71.4%; Pred. No. 2.5e+03; Matches 5; Conservative 1; Mismatches 1; Indels
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SOFT TWENTY
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CHH3_BOMMO
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Matches 3
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Frigerio J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               proteins.";
Electrophoresis 20:1098-1108(1999)
-!- FUNCTION: ASSOCIATED WITH THE
                                                                                                                                                 SIGNAL
NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
01-FEB-1991 (Rel. 17, Last annotation update)
CHORION CLASS HIGH-CYSTEINE HCA PROTEIN 13 PRECURSOR (HC-A.13)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PHOTOSYSTEM II (BY SIMILARITY).

-i- SUBCELLULAR LOCATION: CHLOROPLAST THYLAKOID MEMBRANE; ASSOCIATED WITH THE PHOTOSYSTEM II COMPLEX (BY SIMILARITY).

-i- MISCELLANEOUS: ON THE 2D-GEL THE DETERMINED PI OF THIS PROTEIN (SPOT NI79) IS: 5.9, ITS MW IS: 22 KDA.

-i- SIMILARITY: TO OTHER OEE2 SUBUNITS.
                                                                                                                                                                                                    PIR;
                                                                                                                                                                                                                                                                   use by non-profit institutions as long as modified and this statement is not removed. Use this requires a license agreement (See htter)
                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Photosynthesis; Photosystem II; Chloroplast; Thylakoid NON_TER 13 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Separation
                                                                                                                                                                                                                                                   entities requires a license agreement (See http://www.or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                        duplications and a putative gene-conversion J. Mol. Evol. 20:265-273(1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Diversity in a chorion multigene family created by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 85083111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P20729;
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                                                                                                                                   SEQUENCE
                                                                                                                                                                                  Eggshell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rodakis G.C., Lecanidou
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bombycoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bombyx mori (Silk moth)
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                                               Local Similarity hes 3; Conser
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FUNCTION: THIS
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4; Conservative
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ion and characterization of
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J.-M., Plomion C.;
                                                                                                                                                                                  Chorion;
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                                                 Conservative
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80
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Pred. No.
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                                                                                                                                                                                 family;
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1.2e+03;
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                                                                                                                                                                                  Signal
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MBL outstation -
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CT21_LITCI
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Best Local S
Matches 4
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Amphibia; E
              PEPTIDE
PEPTIDE
PEPTIDE
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SEQUENCE
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                                                                                    TISSUE
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CYTOCHROME C OXIDATE

Thunnus obc
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P81847; P81848; P81850;
P81847; P81848; P81850;
30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
CITROPIN 2.1.3 [CONTAINS: CITROPIN 2.1.2; CITROPIN 2.1.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P80980;
01-NOV-1997
01-NOV-1997
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Thunnus obesus (Bigeye tuna).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Actinopteryqii, Meopteryqii; Teleostei; Euteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Percifo
                                                                                                    wegener K.L., Wabnitz P.A., Carver J.A., Bowie J.H. Wallace J.C., Tyler M.J.;
"Host defence peptides from the skin glands of the mountains tree-frog litoria citropa. Solution struc antibacterial peptide citropin 1.1.";
Eur. J. Biochem. 265.627-637(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oxidoreductase; Mitochondrion.
NON_TER 20 20
SEQUENCE 20 AA; 2303 MW; 0
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Kadenbach B.;
                                                                                                                                                                                                                                     TISSUE=SKIN;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-HEART;
                                                                                                                                                                                                                                                                                                          Litoria citropa (Australian blue mountains tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10 DFGFPKH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . J. Biochem. 248:99-103(1997).

FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN MITOCHONDRIAL ELECTRON TRANSPORT.

CATALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)O +
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                                                                                         SPECIFICITY:
 26
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(Rel. 35, Last sequence update)
(Rel. 35, Last annotation update)
OXIDASE POLYPEPTIDE VIIB-HEART (
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57.1%;
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                                                                                         DORSAL AND SUBMENTAL
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CITROPIN 2.1.
CITROPIN 2.1.1.
CITROPIN 2.1.2.
CITROPIN 2.1.3.
7490C28EB2E4899A
                                                                                                                                                                                                 Carver J.A., Bowie J.H.,
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Pred. No. 1.9e
0; Mismatches
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1.9e+03
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Best Local S
Matches 3
                                                                                                                                                                                                                                           Chloroplast.

Eukaryota; stramenopiles; Bacillariophyta; Coscinodiscophyceae; Biddulphiophycidae; Eupodiscales; Eupodiscaceae; Odontella.
                                                                                                                                                                                                                                                                                                                   P49839;
01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
HYPOTHETICAL 3.2 KDA PROTEIN IN RPOC2-RPS2 INTERGENIC REGION
                                        the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
 Chloroplast;
                   EMBL; 267753;
                                                                                                                     This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN
                                                                                                                                                              Odontella sinensis.";
Plant Mol. Biol. Rep. 13:336-342(1995).
                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                              Odontella sinensis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
01-DEC-1992 (Rel. 24, Last annotation update)
CARBON MONOXIDE DEHYDROGENASE MEDIUM CHAIN (EC 1.2.99.2) (FRAGMENT).
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01-FEB-1991
                                                                                                                                                                                               Kowallik K.V., Stoebe B., Schaffran I., Kroth-Pancic P., Frei
"The chloroplast genome of a chlorophyll a+c-containing alga,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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Bacteria; Proteobacteria; beta subdivision; Comamonadaceae;
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SUBUNIT: CONSISTS OF THREE POLYPEPTIDE
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23.1%;
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DT 15-JUL
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                                                                                                                                                                                PSBP_PINPS STANDARD; PRT; 13 AA. P81668; 15-JUL-1999 (Rel. 38, Created) 15-JUL-1999 (Rel. 38, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation update) 0XYGEN-EVOLVING ENHANCER PROTEIN 2 (OEED) (23 EVOLVING SYSTEM OF PHOTOSYSTEM II) (FRAGMENT).
    TISSUE-NEEDLE;
MEDLINE; 99274088
                                                                                         Coniferopsida;
                                                                                                                 Pinus pinaster (Maritime pine).
Eukaryota; Viridiplantae; Embry
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Biochim. Biophys. Acta 445:1-13(1976).
-i-CATALYTIC ACTIVITY: L-GLUTAMATE +
+ NH(3) + NADH.
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Veronese F.M., Bevilacqua R., Boccu E., Brown Purification, characteristics and sequence
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Eukaryota; Metazoa; Chordata; Craniata;
Actinopterygii; Neopterygii; Teleostei;
Acanthomorpha; Acanthopterygii; Percomor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
NAD-SPECIFIC GLUTAMATE DEHYDROGENASE (EC 1.4.1.2) (NAD-GDH)
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leostei; Euteleostei; Neoteleostei;
Percomorpha; Perciformes; Scombroidei;
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RESULT 7
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01-OCT-2000 (Rel. 40, Last sequence update)
01-OCT-2000 (Rel. 40, Last annotation update)
01-OCT-2000 (Rel. 40, Last annotation update)
CYTOCHROME C OXIDASE POLYPEPTIDE VIIA-HEART, MITOCHONDRIAL
(EC 1.9.3.1) (CYTOCHROME C OXIDASE SUBUNIT VIIA-H) (COX VIIA-M)
                                                    15-DEC-1998 (Rel. 29, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
MITOCHONDRIAL MATRIX PROTEIN P1 (60 KDA CHAPERONIN) (
PROTEIN 60) (HSP-60) (PROTEIN CPN60) (GROEL PROTEIN)
MMP-P1 OR HSP60.
                                                                                                                           CH60_DROME
P35380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oxidoreductase; Inner membrane; NON_TER 23 23 SEQUENCE 23 AA; 2635 MW; BCI
                                                                                                                                                                                                                                                                                                        NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _CANFA
                   Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata;
Pterygota; Neoptera; Endopterygota; Dipters
                                                                                         01-JUN-1994 (Rel.
01-JUN-1994 (Rel.
15-DEC-1998 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COXK_CANFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- SIMILARITY: BELONGS TO PIR; S43632; S43632.
                                                                                                                                                                                                                                                                                                                    Oxidoreductase; Inner membrane; NON_TER 23 23
                                                                                                                                                                                                                                                                                                                                                                           Linder D., Freund R., Kadenbach B.;
"Species specific expression of cytochrome c oxidase isozymes.";
Comp. Blochem. Physiol. 112B:461-469(1995).
-i. FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE
CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN
MITOCHONDRIAL ELECTRON TRANSPORT.
-i. CATALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)0 +
                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-BRAIN, AND HEART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COX7A1 OR COX7AH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mammalia; Eutheria; Carnivora;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FRAGMENT)
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                                                                                                                                                                                                                                                                                                                                                                  4 FERRICYTOCHROME C
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                                                                                                                                                                                                                        LLQMDFGFPKHL
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                                                                                                                                          STANDARD;
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oa; Chordata; Craniata; Vertebrata;
                                                                                        29, Created)
29, Last sequence 37, Last annotation
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                                                                                                                                                                                                                                                                                                         2627 MW;
         Endopterygota; Diptera; ilidae; Drosophila.
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                    Hexapoda; Inse
a; Brachycera;
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                                                                   (HEAT SHOCK (FRAGMENT).
                               Insecta
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                       Muscomorpha;
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21-JUL-1986 (Rel. (
01-FEB-1996 (Rel. 3
ANGIOTENSINOGEN (FF
                                                                                                    PEPTIDE
NON_TER
SEQUENCE
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Santaren J.F., van Damme
Garcia-Bellido A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chaperone; ATP-binding; Mitochondrion NON_TER 1 1 1 NON_TER 11 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Exp. Cell Res. 206:220-226(1993)
                                                                                                                                                                                                                                                                                                                                                                                                        Skeggs L.T. Jr., Kahn J.R., Lentz K., Shumway N.P.;
"The preparation, purification, and amino acid sequel
polypeptide renin substrate.";
J. Exp. Med. 106:439-453(1957).
-i- FUNCTION: IN RESPONSE TO LOWERED BLOOD PRESSURE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "The preparation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota;
Mammalia; |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANGT_HORSE P01016;
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PROSITE; PS00296;
                                                                                                                                                               Vasoconstrictor; Plasma; PEPTIDE 1 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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                                                                                                                                                                                                                                                                 TISSUE SPECIFICITY: SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                       CLEAVES ANGIOTENSIN I, FROM ANGIOTENSINOGEN. ACE (ANGIOTENSIN CONVERTING ENZYME) THEN REMOVES A DIPEPTIDE TO YIELD THE PHYSIOLOGICALLY ACTIVE PEPTIDE ANGIOTENSIN II, THE MOST POTENT PRESSOR SUBSTANCE KNOWN, WHICH HELPS REGULATE VOLUME AND MINER BALANCE OF BODY FLUIDS.
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                    17.6%;
83.3%;
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Score 24; DB Pred. No. 6.3e 0; Mismatches
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Pred. No. 4.
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ANGIOTENSIN
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Best Local S
Matches 5
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01-OCT-1989
01-FEB-1996
                                                                                            Vitamin A; Transport
NON_TER 24 :
SEQUENCE 24 AA; 2:
                                                                                                                                       PIR;
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P12663;
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                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                              RETINOL-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Studies of the structure of canine fibrinogen.";
Thromb. Res. 7:599-610(1975)
-:- FUNCTION: FIBRINOGEN HAS A DOUBLE FUNCTION: YIELDING MONOME
POLYMERIZE INTO FIBRIN AND ACTING AS A COFACTOR IN PLATELET
                                                                                                                                                                               <del>-</del>
                                                                                                                                                                                                                                                                      MEDLINE; 86301171.
Fong S.L., Cook R.G.,
Bridges C.D.B.;
                                                                                                                                                                                                                                                                                                                                            Bovidae;
                                                                                                                                                                                                                                                                                                                                                                                Ovis aries (Sheep).
                                                                                                                                                                                                                                                                                                                                                                                                       01-007-1989 (Rel. 12, Created)
01-007-1989 (Rel. 12, Last sequence update)
01-0EB-1996 (Rel. 33, Last annotation update)
INTERPHOTORECEPTOR RETINOID-BINDING PROTEIN (
RETINOL-BINDING PROTEIN) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INTERPRO; IPRO02181; -.
PROSITE; PS00514; FIBRIN_AG_C_DOMAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -
                                                                                                                                                                                                                      ÷
                                                                                                                                                                                                                                    FEBS Lett. 205:309-312(1986)
                                                                                                                                                                                                                                          "N-terminal sequence homologies in interstitial proteins from 10 vertebrate species.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Birken
                                                                                                                                                                                                                                                                                                                   EQUENCE.
1 LDGCLLLQMDFGFPKHLL
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                                                                                                                                                           FUNCTION: IRBP SHUTTLES 11-CIS AND ALL TRANS RETINOIDS BETWEEN THE RETINOL ISOMERASE IN THE PIGMENT EPITHELIUM AND THE VISUAL PIGMENTS IN THE PHOTORECEPTOR CELLS OF THE RETINA.

SUBCELLULAR LOCATION: INTERPHOTORECEPTOR MATRIX THAT PERMEATES THE SPACE BETWEEN THE RETINA AND THE CONTIGUOUS LAYER OF PIGMENT PRIMER THE RETINA CRIP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBUNIT: HEXAMER CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS (ALPHA, BETA, & GAMMA), LINKED TO EACH OTHER BY DISULFIDE BONDS. MISCELLANEOUS: CONVERSION OF FIBRINOGEN TO FIBRIN IS TRIGGERED BY THROMBIN, WHICH CLEAVES FIBRINOPEDTIDES A AND B FROM ALPHA & BETA CHAINS, AND THUS EXPOSES THE N-TERMINAL POLYMERIZATION SITES RESPONSIBLE FOR THE FORMATION OF THE SOFT CLOT. THE SOFT CLOT IS CONVERTED INTO THE HARD CLOT BY FACTOR XIIIA WHICH CATALYZES THE EPSILON-(GAMMA-GLUTAMYL)LYSINE CROSS-LINKING BETWEEN GAMMA CHAINS (STRONGER) AND BETWEEN ALPHA CHAINS (WEAKER) OF DIFFERENT
                                                                                                                                                   EPITHELIUM CELLS.
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ER 24 24
                           Similarity 33.06; Conservative
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5; Conserv
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Cetartiodactyla; Ru
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                         Score 28; DB
Pred. No. 2.6e
6; Mismatches
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Pred. No.
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Ruminantia; Pecora; Bovoidea
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2.6e+02;
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Best Local S
Matches 6
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Bridges C.D.B.;
"N-terminal sequence homologies in interstitial retinol-binding vertebrate species.";
FEBS Lett. 205:309-312(1986).
-!- FUNCTION: IRBP SHOTTLES 11-CIS AND ALL TRANS RETINOIDS BETWEEN THE RETINOL ISOMERASE IN THE PIGMENT EPITHELIUM AND THE VISUAL PIGMENTS IN THE PHOTORECEPTOR CELLS OF THE RETINA.
-!- SUBCELLULAR LOCATION: INTERPHOTORECEPTOR MATRIX THAT PERMEATES THE SPACE BETWEEN THE RETINA AND THE CONTIGUOUS LAYER OF PIGME!
                                                                                                                                                                                                       (PRAGMERI).
Oncorhynchus mykiss (Rainbow LLLL,)
Eukaryota; Metazoa; Chordata; Crania
Actinopterygii; Neopterygii; Teleost
Actinopterygii; Salmoniformes;
                                                                                                                                                                                                                                                                                                              COXJ_ONCMY
P80333;
01-OCT-1994
01-OCT-1994
01-OCT-2000
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                          MEDLINE; 94237150.

Freund R., Kadenbach B.;

Freund R., Kadenbach B.;

Freund R., Kadenbach B.;

Identification of tissue-specific isoforms for subunits vb and VII

of cytochrome c oxidase isolated from rainbow trout.";

Eur. J. Blochem. 221:1111-1116(1994).

1- FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE

CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN

MITOCHONDRIAL ELECTRON TRANSPORT.

1- CATALTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)O +

AETHNICATION CONTRACTOR OF THE TERMINAL OXIDASE IN

MITOCHONDRIAL ELECTRON TRANSPORT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IRBP_PIG STANDARD; PRT; 25 AA. P12662; 01-OCT-1989 (Rel. 12, Created) 01-OCT-1989 (Rel. 12, Last sequence update) 01-FEB-1996 (Rel. 33, Last annotation update) 01-FEB-1996 (Rel. 33, Last annotation update)
                                                                                                                                                                                                                                                                                                 CYTOCHROME C
                                                                                                                                                                        TISSUE=LIVER;
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                 4 FERRICYTOCHROME C
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6; Conserv
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Eutheria;
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25 AA; 2813
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(Rel. 30, Last sequence update)
(Rel. 40, Last annotation update)
C OXIDASE POLYPEPTIDE VIIA-LIVER (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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 LOCATION:
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                                                                                                                                                                                                                 (Rainbow trout) (Salmo gairdner1).
Chordata; Craniata; Vertebrata; Eu
pterygil; Teleostet; Euteleoste;
; Salmoniformes; Salmonidae; Oncorh
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 MITOCHONDRIAL INNER
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Pred. No. 2.7e
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2.7e+02;
7;
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DHE2_THUTH
PSEP_PINPS
CH13_BOMMO
COXN_THUOB
CT21_LITCI
ALR_PSEFL
SAMP_MUSCA
LITCH
ANF2_MELGA
AMD1_RABIT
CR17_LITCH
ANF3_MELGA
AMD1_RABIT
MEL_APIDO
TEML_RANTE
MDH_SYNY4
DRPH_UCAPU
ATPB_HYPA
OMP1_ACTPL
TRYP_PROAT
SODM_RANCA
CCAA_STRTI
GS15_BACSU
                                                                                                                                                                                                                                                                                                                                                                                                                                COXJ_SHEEP
FIBG_CANFA
IRBP_SHEEP
IRBP_PIG
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                                                                                                                                                                                                                                                               p12663 ovis aries
p12662 sus scrofa
p80333 oncorhynchu
Q9trz8 canis famil
p35380 drosophila
p01016 equus cabal
p19914 pseudomonas
p49839 odontella s
p20016 thunnus thy
p81668 pinus pinas
p200729 bombyx mori
p80980 thunnus obe
p81847 litoria cit
   P01016
P19914
P49839
P20016
P80788
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P12800 canis famil
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                                                         1 litoria chl
3 meleagris gal
3 gallus gall
2 oryctolagus
2 apis dorsat
3 rana tempor
0 synechocyst
1 uca pugilat
8 physcomitre
8 actinobacil
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mustelus ca
cryctolagus
litoria xan
 l protopterus
5 rana catesb
5 streptomyce
1 bacillus su
       RP
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RESULT FIBG_CI ID FID DT O DT O DT O O C O C O C O C O C O C O C O C O C	Oy MA	RESUITE RESUITATION RESUITE RESUITE RESUITE RESUITE RESUITE RESUITE RESUITE RE	
ULT G_CAN FIB P12 01:- 01:- C1:- FIB FIB FIB FAG Can Euk	Query Ma Best Loo Matches		30000000000000000000000000000000000000
FIBG_CANFA STANDARD; PRT; 24 AA. FIBG_CANFA STANDARD; PRT; 24 AA. P12800; 01-OCT-1989 (Rel. 12, Created) 01-OCT-1989 (Rel. 34, Last sequence update) 01-OCT-1996 (Rel. 34, Last annotation update) FIBRINGGEN GAMMA-CHAIN (FRAGMENT). FGG. Canis familiaris (Dog). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; SEQUENCE.	tch 24.3%; Score 33; DB 1; Len sal Similarity 58.3%; Pred. No. 43; 7; Conservative 0; Mismatches 5; LLQMDFGFPKHL 17	HEEP OXJ_SHEEP STANDARD; PRT; 24 AA. 97R30; 1-OCT-2000 (Rel. 40, Created) 1-OCT-2000 (Rel. 40, Last sequence update) 1-OCT-2000 (Rel. 40, Last annotation update) 1-OCT-2000 (Rel. 40, Last sequence update) 1-OCT-2000 (Rel. 40, Last sequence update) 1-OCT-2000 (Rel. 40, Last sequence update) 1-OCT-2000 (Rel. 40, Creation update) 1-OCT-2000 (Rel. 40, Last sequence update) 1-OCT-2000 (Rel. 40, Creation	19 14.0 12 1 CD11_LITXA 19 14.0 12 1 CD14_LITXA 19 14.0 13 1 SODM_CANFA 19 14.0 13 1 SODM_CANFA 19 14.0 19 1 MDH_SHEPU 19 14.0 19 1 UP21_UPEIN 19 14.0 19 1 UP25_UPEIN 19 14.0 20 1 ITRA_ALBJU 19 14.0 21 1 DCMS_PSECA 19 14.0 24 1 FEDG_ANYME 19 14.0 24 1 FEDG_ANYME 19 14.0 24 1 FEDG_ANSME 19 14.0 24 1 PEPI_ASPNG 19 14.0 25 1 BOTR_BOTJA ALIGNMENTS
Euteleostom1; Canis.	Indels 0; Gaps .0;	(MITOCHONDRIAL) (FRAGMENT). a; Euteleostomi; Pecora; Bovoidea; Pecora; Bovoidea; Pecora isozymes."; CODED POLYPEPTIDE OXIDASE IN 2) = 2 H(2)0 + ASE VIIA FAMILY. C64;	P56245 litoria xan P56246 litoria xan P56246 litoria xan P54712 canis famil P82177 shewanella P82027 uperoleia i P82021 uperoleia i P82021 uperoleia i P24925 albizzia ju P19921 pseudomonas P80707 amycolatops P16351 crotalaria P55749 aspergillus P52028 bothrops ja

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cytochrome P450 AL-2 - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 06-Jan-1995
C;Accession: B61597
R;Shimeno, H; Toda, A.; Ogata, S.; Nagamatsu, A.
Drug Metab. Dispos. 19, 291-297, 1991
A;Title: Purification and aminopyrine monooxygenase activity of liver microsomal cytochr
A;Reference number: A61597; MUID:91292910
A;Accession: B61597
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-14 <SHI>
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N;Alternate names: nuclease Le3
C:Species: Lentinula edodes (shiitake mushroom)
C:Date: 21-Jul-1995 #sequence_revision 03-Aug-1995 #text_change 20-Mar-1996
C:Accession: PC4030
R;Kobayashi, H: Inokuchi, N.; Koyama, T.; Tomita, M.; Irie, M.
Biosci. Biotechnol. Biochem. 59, 1169-1171, 1995
A;Title: Purification and characterization of the 2nd 5'-nucleotide-forming nuclease from A; Accession: PC4030; MUID:95337563
Search completed: December 21, 2000, 08:39:30 Job time: 134 sec
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A;ResIdues: 1-23 <KOB>
C;Comment: This enzyme has 3'-nucleotidase activity.
C;Keywords: endonuclease; hydrolase
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Best Local Similarity 47.1%;
Matches 8; Conservative
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Best Local Similarity 42.9%;
Matches 6; Conservative
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Pred. No. 9.7e+02;
1; Mismatches 3;
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RESULT
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A;Title: Isolation and characterization of an alicyclic amine A;Reference number: PC2199; MUID:95119961
A;Accession: PC2199
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Sep-1994 #sequence_revision 05-Apr-1995 #text_change
C;Accession: PC2199
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A;Accession: $59492
A;Status: preliminary
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R;Friedebold, J.; Mayer, F.; Bill, E.; Trautwein, A.X.; Bowien, Biol. Chem. Hoppe-Seyler 376, 561-568, 1995
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alanine dehydrogenase (EC 1.4.1.1) - oscillatoriacean cyanobacterium (fragment) C;Species: oscillatoriacean cyanobacterium C;Date: 22-Apr-1995 #sequence_revision 26-May-1995 #text_change 07-May-1999 C;Accession: PX0078
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PX0078
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57.1%;
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A; Note: the source is designated as Phormidium lapideum C; Comment: This enzyme catalyzes a reversible oxidative deamination of C; Superfamily: alanine dehydrogenase; alanine dehydrogenase homology C; Keywords: oxidoreductase
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A;Title: Purification and characterization of alanine careference number: PX0078; MUID:95204408
A;Accession: PX0078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Species: Schizosaccharomyces pombe
C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_change 21-Jan-2000
C;Accession: T44936
R;Alcession: V; Aligue, R.
submitted to the EMBL Data Library, May 1996
A;Reference number: Z22873
A;Accession: T44936
                                                                                                                                                                                                                                                                                                         ornithine carbamoyltransferase (EC 2.1.3.3), anabolic - Aeromonas formicans (fragment C;Species: Aeromonas formicans C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999 C;Accession: A60743
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A; Molecule type: protein
A; Residues: 1-17 <TRI>
C; Keywords: transferase
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A; Residues: 1-16 <ALE>
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J. Gen. Microbiol. 135, 2453-2464, 1989
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Pred. No. 8.7e+02;
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A;MoLecule type: protein A;Residues: 1-25 <FGN> C;Superfamily: interphotoreceptor retinoid-binding protein C;Keywords: duplication
                                                                                                                                                                                                           R;Fong, S.L.; Cook, R.G.; Alvarez, R.A.; Liou, G.I.; Landers, R.A.; Bridges, C.D.B. FEBS Lett. 205, 309-312, 1986
A;Title: N-terminal sequence homologies in interstitial retinol-binding proteins from A;Reference number: A91365; MUID:86301171
A;Accession: B24417
                                                                                                                                                                                                                                                                                                          Interphotoreceptor retinoid-binding protein pig (fragment)
N;Alternate names: interstitial retinoi-binding protein
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-May-1988 #sequence_revision 21-May-1988 #text_change 21-Nov-1997
C;Accession: B24417
C;Accession: B24417
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B24417
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A;Residues: 1-24 <FON>
C;Superfamily: interphotoreceptor retinoid-binding protein
C;Keywords: duplication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interphotoreceptor retinoid-binding protein - sheep (fragment)

NALTERNATE names: interstitial retinol-binding protein

C:Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)

C:Date: 21-May-1988 #sequence_revision 21-May-1988 #text_change 21-Nov-1997

C:Accession: A24417

R:Fong, S.L.; Cook, R.G.; Alvarez, R.A.; Liou, G.I.; Landers, R.A.; Bridges, C.D.B.

FEBS Lett. 205, 309-312, 1986

A:Title: N-terminal sequence homologies in interstitial retinol-binding proteins from

A:Reference number: A91365; MUID:86301171

A:Accession: A24417

A:Accession: A24417
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fibrinogen gamma chain - dog (fragment)
C:Species: Canis lupus familiaris (dog)
C:Species: Canis lupus familiaris (dog)
C:Date: 05-Jun-1987 #sequence_revision 05-Jun-1987 #text_change 10-Mar-1994
C:Accession: A05298
R:Birken, S.; Wilner, G.D.; Canfield, R.E.
Thromb. Res. 7, 599-610, 1975
A:Title: Studies of the structure of canine fibrinogen.
A:Reference number: A94308; MUID:76081726
A:Accession: A05298
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A;Residues: 1-24 <BIR>
C;Superfamily: fibrinogen gamma chain; fibrinogen beta/gamma homology
C;Keywords: blood coagulation; liver; plasma
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A; Molecule type: protein
A; Residues: 1-23 <FRE>
A; Note: the source is des
C; Genetics:
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                                                                                                  Eur. J. Biochem. 221, 1111-1116, 1994
A;Title: Identification of tissue-specific
A;Reference number: $43624; MUID:94237150
A;Accession: $43632
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S43632
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A;Residues: 1-21 <SCH>
C;Superfamily: human hexokinase I; hexokinase homology
C;Keywords: ATP; glycolysis; phosphotransferase
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Arch. Biochem. Biophys. 257, 1-12, 1987
A;Title: Rat brain hexokinase: amino acid sequence at the A;Reference number: A90080; MUID:87324917
A;Accession: A32521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hexokinase (EC 2.7.1.1) I peptide III - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 12-Apr-1995
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A;Accession: S36662
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C:Species: Phyllomedusa bicolor (two-colored leaf frog)
C:Date: 10-Dec-1993 #sequence_revision 13-Mar-1997 #text_change 31-Mar-2000
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Copyright (c) 1993 - 2000 Compugen Ltd
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DВ
                                                 B24417
S36662
A32521
S43632
PC2199
S59492
PX0078
T44936
A60743
PC4030
B61597
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A39504
A05298
A24417
                                                             $03879

A01250

PL0142

A60834

D48394

$71864

$71869

PN0175

B60822

A37984
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               A35418
S78374
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                              carbon-monoxide de angior fat-globule glutathione transf T-cell receptor de glutathione transf cytochrome P450 UT ADP,ATP carrier pr multicatalytic end brain natriuretic
                                                                                                                                                                                                           formate dehydrogen
alanine dehydrogen
alanine dehydrogen
calmodulin kinase
ornithine carbamoy
rRNA endonuclease
cytochrome P450 AL
6-phosphofructokin
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                                                                                                                                                                                                                                                                                                                                                            interphotoreceptor dermorphin (Lys-7) hexokinase (EC 2.7
                                                                                                                                                                                                                                                                                                                                                                                                                                            MUC1 enhancer bind octamer-binding pr
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hypothetical prote protein QF200070 -
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ALIGNMENTS

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Similarity 5; Conservat 6; Conservat 7	nd characterization of the control o	RESULT 2 A39504 Octamer-binding protein, Ku-like, 72K chain - human (fragment) C.Species: Homo sapiens (man) C.Species: Homo bec-1991 #sequence_revision 30-Dec-1991 #text_change 30-Sep-1993 C.Accession: A39504 C.Accession: A39504 R.May, G.; Sutton, C.; Gould, H. R.May, G.; Sutton, C.; Gould, H.	Query Match 21.3%; Score 29; DB 2; Length 26; Best Local Similarity 37.5%; Pred. No. 3.7e+02; Matches 6; Conservative 4; Mismatches 6; Indels 0; Gaps 0; Qy 5 LLLOMDFGFPKHLLVD 20 3:	A; Reterrice number: A3910 A; Accession: B59018 A; Molecule type: protein A; Residues: 1-17;18-26 <abe> A; Esperimental source: breast cancer cell line MCF-7 A; Experimental source: breast cancer cell line MCF-7 C; Keywords: DNA binding; heterodimer</abe>	B59018 MUC1 enhancer binding protein 85k chain MUC1EBP-85 - human (fragments) C;Species: Homo sapiens (man) C;Species: Homo sapiens (man) C;Date: 08-May-1998 #sequence_revision 08-May-1998 #text_change 08-May-1998 C;Accession: B59018 C;Accession: B59018 C;Accession: Soilth, C.J.; Larson, C.J. R;Abe, M.; Smith, C.J.; Larson, C.J. submitted to the Protein Sequence Database, May 1998 A;Description: Involvement of "Ku-like" proteins in the transcription of MUC1/DF3, a

RESULT

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TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 466-6000
TELEPAX: (617) 466-6040
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 26 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FRAGMENT TYPE: N-terminal
US-08-482-142-22
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                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII TEXT
CURRENT APPLICATION NUMBER: US/08/478,572
FILING DATE: 07-June-1995
CLASSIFICATION EATA:
APPLICATION NUMBER: 08/445,307
FILING DATE: IFORMATION:
APPLICATION NUMBER: 08/445,307
FILING DATE:
APPLICATION NUMBER: 08/445,307
FILING DATE:
APPLICATION NUMBER: 03,976
REGISTRATION NUMBER: 32,976
REGISTRATION UMBER: 32,976
REGISTRATION INFORMATION:
TELEPHONE: (617) 466-6000
TELEFAX: (617) 466-6040
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LEMCTH: 26 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-478-572-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 21.3%;
Best Local Similarity 41.7%;
Matches 5; Conservative
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APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Chen, Xian
APPLICANT: Evans, Sean
APPLICANT: Shaked, Ze'ev
TITLE OF INVENTION: T CELL EPITOPES OF THE MAJOR ALLERGENS
TITLE OF INVENTION: FROM DERMATOPHAGOIDES (HOUSE DUST MITE)
NUMBER OF SEQUENCES: 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 07 June 1995
ATTORNEY/AGENT INFORMATION:
NAME: CRAIG, ANNE I.
REGISTRATION NUMBER: 32,976
REFERENCE/DOCKET NUMBER: 01:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 610 LI
CITY: WALTHAM
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | | ::| | |:
11 DGTRIIQRDNGY 22
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amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
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Greenstein, Julia
Kuo, Mei-chang
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Pred. No. 1.5e+02;
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; TOPOLOGY: linear;
; MOLECULE TYPE: Peptide
; FRAGMENT TYPE: N-terminal
US-08-478-572-22

Query Match
Best Local Similarity 41.7%; Pred. No. 1.5e+02;
Matches 5; Conservative 3; Mismatches 4; Indels 0; Gaps
Qy 2 DGCLLLOMDFGF 13
|| ::| | | :
Db 11 DGTRIIQRDNGY 22

Search completed: December 21, 2000, 08:39:07
Job time: 141 sec
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TOPOLOGY: 11;

MOLECULE TYPE:
US-08-827-618A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Watches 5; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-483-952A-22
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 22, Application US/08483952A Patent No. 6011139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/827,618A
FILING DATE: 09-APR-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/485,725
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NEORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert
STREET: Four Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                             APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L.
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-60780-12/RFT/MTK
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
TELEFAX: 415-398-3249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/716,909 FILING DATE: 18-JUN-1991 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 21-SEP-1990 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: SE
STATE: (
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
APPLICATION NUMBER: US/08/483,952A FILING DATE: 07-JUN-1995
                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                          CITY: San Francisco
                                                                                                                                                   ZIP: 94111-4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
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09-APR-1997
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50.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 29;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22, Applicat Patent No. 5820862 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 415-398-3249 INFORMATION FOR SEQ ID NO:
                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII TEXT
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                   APPLICANT: Evans, Sean
APPLICANT: Shaked, Ze'ev
TITLE OF INVENTION: T CELL EPITOPES OF THE MAJOR ALLERGENS
TITLE OF INVENTION: FROM DERMATOPHAGOIDES (HOUSE DUST MITE)
NUMBER OF SEQUENCES: 207
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CLASSIFICATION: 536

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/586,536

APPLICATION NUMBER: 21-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-60780-7/RFT/MTK
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
TELEFAX: 415-700-7777
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 536 PRIOR APPLICATION DATA:
                                                  APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995
                                                                                                                                                                                  COUNTRY: UZIP: 02154
                                                                                                                                                                                                                               STREET: 610 L:
CITY: WALTHAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 415-70 TD NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 0 FILING DATE: 17-SEP-1993 CLASSIFICATION: 536
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                                                                                                                                                                                                                                                                                                                                                                                Chen, Xian
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50.0%;
   US/08/445,307
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                                                                 US/08/482,142
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Pred. No. 1.1e+02;
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SEQUENCE
US-08-973-225-142
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US-09-244-298A-142
                                                                           NAME: Hrubiec, Robert T.
REGISTRATION NUMBER: 36,392
REFERENCE/DOCKET NUMBER: PK32
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-248-1000
INFORMATION FOR SEQ ID NO: 142:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 142, Application US/09244298A Patent No. 6121238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION UNBER: US/09/244,298A FILING DATE: 11-DEC-1996
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION: NAME: Hrublec, Robert T.
                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: PEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity hes 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Glaxo Wellcome
STREET: Five Moore Drive, P.O.
CITY: Research Triangle Park
                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                              TOPOLOGY:
                                              STRANDEDNESS
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MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                               27709
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                                                               amino acid
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Cwirla, Steven E.
Gates, Christian
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Wagstrom, Christopher R.
Hendren, Richard W.
Deprince, Randolph B.
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                                  linear
               peptide
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36.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2;
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Query Match

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RESULT 11
US-08-484-530-22
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US-08-484-530-22
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Best Local Similarity
"~+~hes 5; Conserve
                                                                                                                                                                                              RESULT 12
US-08-827-618A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Tobin, All APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L.
TITLE OF INVENTION: Cloned Glutamic Ac
NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hohbach, Test, Alk
STREET: Four Embarcadero Center, Su
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Tobin, Allan J
GENERAL INFORMATION:

APPLICANT: Tobin, Allan J

APPLICANT: Erlander, Mark G

APPLICANT: Kaufman, Daniel L.

TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase

NUMBER OF SEQUENCES: 60

CORRESPONDENCE ADDRESS:

ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert

STREET: Four Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
TELEPAS: 415-398-3249
INFORMATION FOR SEQ ID NO: 22:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/484,530 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: FOUL CITY: San Francisoc STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
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linear
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Pred. No. 1
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Suite 3400
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Query Match
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                                                                                                                                                                                                                                                                                                                                                                                     RESULT 8
US-08-764-640-142
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Timian, Susan J.

REGISTRATION NUMBER: 34,103
REFERENCE/DOCKET NUMBER: 20884/101
TELECOMMUNICATION INFORMATION:
TELEPHONE: (716) 263-1636
TELEPHONE: (716) 263-1600
INFORMATION FOR SEQ ID NO: 60:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 amino acids
                                                                                                                                                                                                                                                                                                                                      Patent No. 5869451
Patent No. 5869451 5837683
                                                                                                                                                                                                                                                                                                                                                                      Sequence 142, Application US/08764640
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 17-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: Timian, Susan J.
                                                                                                                                                           APPLICANT:
                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                          APPLICANT:
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APPLICANT:
                                                                            TITLE OF INVENTION: PEPTIDES AND COMPOUNDS THAT BIND TO A TITLE OF INVENTION: RECEPTOR NUMBER OF SEQUENCES: 244
CORRESPONDENCE ADDRESS:
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STREET: CALL.
CITY: Rochester
CTATE: New York
TICA
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
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COUNTRY:
                              CITY: Research Triangle Park
                                             STREET:
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TOPOLOGY: Li
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                                                              ADDRESSEE:
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                                          E: Glaxo Wellcome
Five Moore Drive, P.O. Box 13398
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                                                                                                                                            Yin, Qun
                                                                                                                                                        Wagstrom, Christopher R.
Hendren, Richard W.
Deprince, Randolph B.
Podduturi, Surekha
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Cwirla, Steven E.
Gates, Christian
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Pred. No.
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Query Match
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US-08-973-225-142
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 142, Applicat Patent No. 6083913 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Hrubiec, Robert T.
REGISTRATION NUMBER: 36,392
REFERENCE/DOCKET NUMBER: PK:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-248-1000
INFORMATION FOR SEQ ID NO: 142:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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LENGTH: 18 amino acids
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ATTORNEY/AGENT INFORMATION:
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TOPOLOGY: li
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                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
           APPLICATION NUMBER: US/08/973,225A
FILING DATE: 04-Dec-1997
ATTORNEY/AGENT INFORMATION:
NAME: HTUDIEC, Robert T.
REGISTRATION NUMBER: 36,392
REFERENCE/DOCKET NUMBER: PK3065USW
                                                                                                                                                                                                                                                                                                                                                                                             Wagstrom, Christopher R.
Wrighton, Nicholas C.
Wrighton PRETIDES AND COMPOUNDS THAT BIND TO
THROMBOPOIETIN RECEPTOR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Glaxo Wellcome
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STATE: NC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dower, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Haselden, Sherril S.
Mattheakis, Larry C.
Schatz, Peter J.
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CLASSIFICATION: 422 ATTORNEY/AGENT INFORMATION:

REGISTRATION NUMBER:

C/AGENT IN....
Shannon, Karen L.
Shannon, Karen L.
GREAT AND AREA CARE

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GENERAL IN
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Best Local Similarity 40.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Matsushima, Kouji
APPLICANT: Matsumoto, Yoshihiro
APPLICANT: Yamada, Yoshiki
APPLICANT: Sato, Koh
APPLICANT: Tsuchiya, Masayuki
APPLICANT: Yamazaki, Tatsumi
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INFORMATION FOR SEQ ID NO: 17:
                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COmpatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/765,783A
FILING DATE: 07-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
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ADDRESSEE: MORRISON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide
                                                                                                                                                                                                                                              FILING DATE: 07-MAR-CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                               SEQUENCE CHARACTERISTICS:
                                                                                                                     REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 35
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION: NAME: Murashige, Kate H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Reshaped Human Antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid STRANDEDNESS: TOPOLOGY: linear
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CITY: Washington
STATE: DC
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                                                                                                                                                                                                                                FILING DATE:
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STRANDEDNESS:
                                                                                                    TELEFAX: 202-822-0168
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                             LENGTH:
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                               9 amino acids
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Matsumoto, Yoshihiro
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Pred. No. 1
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US-08-406-330-60
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                                                                                  US-08-556-597-60
                                                                                               RESULT
                                                                                                                                         В
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Sequence 60, Application US/08555597
Patent No. 5877155
GENERAL INFORMATION:
APPLICANT: Miller, Jonathan L.
APPLICANT: Lyle, Vicki A.
TITLE OF INVENTION: MIMOTOPES AN
                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No. 5817748
GENERAL INFORMATION:
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Matches 5; Conservative
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Best Local S
                                                                                                                                                                                               Matches
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TELEFAX: (716) 263-166
INFORMATION FOR SEQ ID NO:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (716) 263-1636
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Miller, Jonathan L.
APPLICANT: Lyle, Vicki A.
TITLE OF INVENTION: MIMOTOPES AND ANTI-MIMOTOPES OF
TITLE OF INVENTION: HUMAN PLATELET GLYCOPROTEIN ID/IX
                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 12 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Rochester
STATE: New York
                                                                                                                                                                                               Local Similarity
nes 5; Conserv
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TOPOLOGY: li
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1 QHHFGFPR 8
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o. 5817748
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  MIMOTOPES AND ANTI-MIMOTOPES
                                                                                                                                                                                                            21.3%;
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                                                                                                                                                                                               Score 29; DB Pred. No. 61; 0; Mismatches
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                                                                                                                                                                                                          DB 2;
61;
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Matches

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US-08-199-508-2
; Sequence 2, Application US/08199508
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Best Local Similarity 43.1
Matches 7; Conservative
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 555x
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/039,778B
FILING DATE: 1930323
CLASSIFICATION: 435
PRIOR APPLICATION BATA:
APPLICATION NUMBER: 07/919,731
FILING DATE: 27 July, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00537/068002
TELECOMMUNICATION 1906
TELEPAN: (617) 542-8906
TELEFAN: (617) 542-8906
TELEFAN: 10154
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                                                                 GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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           APPLICANT:
                         APPLICANT:
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: DNA SEQUENCE WHICH TITLE OF INVENTION: PEPTIDE CAPABLE OF TITLE OF INVENTION: ACROMSOME REACTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Spindel, Eliot R.
APPLICANT: Vijayaraghavan, Srinivasan
APPLICANT: Nagalla, Srinivasa R.
APPLICANT: Li, Kang
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CITY: Boston
STATE: Massac
                                                                                                                                                                                             13 GCL-----GIPGHLM 22
                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: U.S.A. ZIP: 02110-2804
                                                                                                                                                                                                                                3 GCLLLOMDFGFPKHLL 18
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5. 5436137
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     Matthews, Maura-Ann H.
Stetler, Gary L.
Anthony-Cahill, Spencer J
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                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                      22.8%; Score 31; 43.8%; Pred. No.
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57;
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Best Local Similarity
Matches 5; Conserv
                 COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY disk
COMPUTER: IBM PC compatible
COMPUTER: PBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/620,151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY AGENT INFORMATION:
NAME: NO. 5717058ak, Henry P.
REGISTRATION NUMBER: 33200
REFERENCE/DOCKET NUMBER: 121 CI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 303-541-3322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 303-541-33:
TELEFAX: 303-444-3013
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                   APPLICANT: Imperiali, Barbara
APPLICANT: Walkup, Grant K.
APPLICANT: Walkup, Grant K.
TITLE OF INVENTION: PEPTIDYL FLUORESCENT CHEMOSENSOR FOR
TITLE OF INVENTION: DIVALENT ZINC
NUMBER OF SEQUENCES: 136
CORRESPONDENCE ADDRESS:
ADDRESSE: BRINKS, HOFER, GILSON & LIONE
STREET: NBC Tower - Suite 3600, 455 N. Cityfront
STREET: Plaza Drive
CITY: Chicago
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: unknown to applicant MOLECULE TYPE: peptide HYPOTHETICAL: yes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/021,536
FILING DATE: February 23, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: Apple MacIntosh
OPERATING SYSTEM: System 7.0.1
SOFTWARE: Microsoft Word 5.0a
CURRENT APPLICATION DATA:
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TITLE OF INVENTION: Modulators of Gene Expression
NUMBER OF SEQUENCES: 57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/199,508 FILING DATE: February 18, 1994 CLASSIFICATION: 435
                                                                                                                                                     COUNTRY: USA
ZIP: 60611-5599
                                                                                                                                                                                         STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11 FGFPKHLLVDFLQ 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 FGYPVYVFGDCVQ 13
                                                                                                                                                                                       Illinois
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MBER: US/08/620,151
22-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.50 inch, 1.4 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 30; DB 1; Pred. No. 76; 4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 CIP
                                                         Version #1.30
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Title: Perfect score: Sequence:

Run OM protein

on:

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Scoring table:

Minimum Maximum

DB BB

seq

Total number of

Sequence

37, Appl
134, App
168, App
168, App
27, Appl
27, Appl
27, Appl
30, Appl
31, Appl
31, Appl
32, Appl
33, Appl
34, Appl
35, Appl
36, Appl
37, Appl
38, Appl

Sequence

Sequence Sequence

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Issued_Patents_AA:*
1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
5: /cgn2_6/ptodata/2,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BLOSUM62
Gapop 10.0 , Gapext 0.
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136
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version Copyright (c) 1993 - 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LDGCLLLQMDFGFPKHLLVDFLQSLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/5COMB.pep:*
/cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /cgn2_6/ptodata/2/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                      Length DB
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  US-08-039-778B-3
US-08-039-778B-2
US-08-139-778B-2
US-08-165-783A-83
US-08-765-783A-83
US-08-76-60-30-60
US-08-76-60-30-60
US-08-973-225-142
US-08-484-530-22
US-08-484-530-22
US-08-484-595-A-22
US-08-483-952A-22
US-08-483-952A-22
US-08-483-952A-22
US-08-483-952A-22
US-08-1142-12
US-08-1142-13
US-08-940-95-133
US-08-940-095-133
US-08-482-142-13
US-08-482-142-13
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Compugen Ltd
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(without alignments)
24.789 Million cell updates/sec
           Sequence 3, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 60, Appl
Sequence 60, Appl
Sequence 60, Appl
Sequence 112, App
Sequence 112, App
Sequence 22, Appl
Sequence 22, Appl
Sequence 23, Appl
Sequence 27, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 113, App
Sequence 27, Appli
Sequence 113, App
Sequence 113, Appl
Sequence 114, Appl
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  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
US-08-039-778B-3
                                                          ; TOPOLOGY: US-08-039-7788-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Patent No.
    Query Match
Best Local Similarity
                                                                                                                                                                FILING DATE: 19930323

CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/919,731
FILING DATE: 27 July, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REGISTRATION NUMBER: 00537/068002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-8906
TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Spindel, Eli
APPLICANT: Vijayaraghav
APPLICANT: Vijayaraghav
APPLICANT: Li, Kang
APPLICANT: Li, Kang
TITLE OF INVENTION: DNA
TITLE OF INVENTION: PEP
TITLE OF INVENTION: ACRE
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
                                                                                                                                            INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.6
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 225 Frani
CITY: Boston
STATE: Massachus
COUNTRY: U.S.A.
ZIP: 02110-2804
                                                                                                                                              TELLEFAX: (V-
TELEFAX: 200154
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US
FILING DATE: 19930323
                                                                                       STRANDEDNESS:
                                                                                                   TYPE:
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o. 5436137
                                                                                                   amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Spindel, Eliot R.
Vijayaraghavan, Sriniv
Nagalla, Srinivasa R.
Li, Kang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Fish & Richardson
225 Franklin Street
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119
119
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA SEQUENCE WHICH ENCODES A PEPTIDE CAPABLE OF PROMOTING
     22.8%;
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US-08-478-572-134
US-08-478-572-134
US-08-475-985-27
US-08-475-985-27
US-08-475-985-27
PCT-US95-04481-30
US-08-630-172-40
US-08-482-651-39
US-08-482-651-39
US-08-478-572-85
US-08-478-572-85
US-08-373-5058-8
US-08-339-5058-8
US-08-339-5058-8
US-08-339-5058-8
US-08-339-5058-8
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       Score
Pred.
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     31;
No.
  DB
25;
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9
                  Length 11;
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Result

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Score

Query Match

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Search completed: December 21, 2000, 08:38:46 Job time: 150 sec
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                                                                                                                              Query Match 23.5%;
Best Local Similarity 61.5%;
Matches 8; Conservative
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07-NOV-1997
07-NOV-1997
07-NOV-1997
07-NOV-1997
07-NOV-1997
17-NOV-1997
17-NOV-1997
17-NOV-1997
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07-NOV-1997;
07-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carter KC, Ebner R,
Kyaw H, Lafleur DW,
Ruben SM, Shi Y, So
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                 as compared to the human protein only.

The invention relates to 125 novel genes and their fragments (nucleic rhe invention relates to 125 novel genes and their fragments (nucleic acid sequences: x84933-x85057; amino acid sequences Y27567-Y27933) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polypeptides in a sample or by determining the presence of mutations in the new polynucleotides. Specific uses are described for each of the 125 polynucleotides, based on which tissues they are most highly expressed in (see X84933 for described
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                   This sequence represents a secreted human protein encoded by the gene clone detailed in the descriptor line. The gene can be used to generate fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. x89924) for increasing the stability of the fused protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 119; 507pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New human secreted proteins and coding sequences useful for treating disorders of the immune system and hyperproliferative disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; X85016.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-337740/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                         Sequence
                                                                                                      14 PKHLLVDFLQSLS 26
                                                                       14 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0064911.
97US-0064912.
97US-0064983.
97US-0064984.
97US-0064985.
97US-0064988.
97US-006698.
97US-0066090.
97US-0066094.
97US-0066095.
97US-0066095.
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97US-0064900.
97US-0064908.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R, Endress GA, Feng P, Janat W, Moore PA, Ni J, Olsen HS, Soppet DR, Wei Y;
                                                                                                                                   Score 32; DB Pred. No. 57; 0; Mismatches
                                                                                                                                                               20; Length 14;
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                                                                                                                                      Indels
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P80053
                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-JAN-1982;
03-FEB-1983;
15-JUL-1985;
                                                                                                                                                                                                                                                                                                                                                                                        DNA unit having a nucleotide sequence which encodes it. Fref. the AA sequence consists of alpha and beta interferons. Pref. If is (1) the 1-73 AA seq. of HuIFN-alpha-1 (and IF2 is the 74-166 AA seq. of HuIFN-beta-1) (see N30155, P30222); or (ii) the 1-41 AA seq. of HuIFN-alpha-61A (and IF2 is the 43-166 AA seq. of HuIFN-beta-1) (see N30160, P30227). Alternativeley IF1 is the amino terminal end of a beta-IF and IF2 is the carboxy terminal of an alpha-IF (esp. the 1-73 seq. of HuIFN-beta-1 and the 74-167 seq. of HuIFN-alpha-1 resp.) (see N30156, P30223). In the examples plasmids poges and pDM101/trp/beta-1 and p-alpha-61A were used (see N30151, N30152, N30157). HinfI was used to digest that sequences in the region of significant handicaps (see N30153, N30158, N30159), and the restriction fragments were ligated to form hybrid DNA.
                                                                                    Alpha-beta hybrid interferon; multi-class hybrid
                                                                                                             Sequence of
                                                                                                                                      17-NOV-1990
            Misc-difference
                                                  Homo
                                                                                                                                                                 P80053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Multi:class hybrid interferon poly:peptide(s) - with restricted antiviral and cell growth regulatory activities
                                                                                                                                                                                        P80053 standard; protein; 12
                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The inventors claim a multiclass hybrid interferon polypeptide and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example; Fig 17; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mark DF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CETU-) CETUS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-JAN-1983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-JUL-1983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO8302461-A
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                                                                                                                                                                                                                                                    10 DFGFPK 15
|||||:
2 dfgfpq 7
                                                 sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N30158.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Creasey AA;
                                                                                                                                                                                                                                                                                                                                                                        12
                                                                        antiviral; therapy.
                                                                                                            human interferon (huIFN) alpha-61A gene around AA
                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                       AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82US-0340782.
83US-0463574.
85US-0755265.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           83WO-0900607
                      Location/Qualifiers
/note="Residue 40"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /label- AA No. 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                   23.5%;
                                                                                                                                                                                                                                                                                                                   Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                . 48;
                                                                                                                                                                                                                                                                                                                                4.
                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                               Length 12
                                                                                    interferon;
                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                       0
                                                                                                             40.
                                                                                                                                                                                                                                                                                                    Gaps
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and trp leader ribosome binding site preceperator, encoding an ATG initiation codon and using HindIII site that was inserted, 59 nucleotides 3'-end of the TGA translational stop codon, to insert the gene into the plasmid pBW11 (a deriv of pBR322 having a deletion between the HindIII and PvuII sites). The complete DNA sequence of the promoter and gene fragments inserted between the EcoRI and HindIII sites of pBW11 is shown in n80049. The hybrid gene was constructed by taking advantage of the homologies between huIFN alpha-61A & huIFN beta-1 at around AA 40 of both proteins. The DNA sequence 5'-proximal to the Dda restriction enzyme cutting site of the huIFN alpha-61A DNA is ligated to the DNA sequence 3'-proximal to the steep of the huIFN beta-1, to create a fusion of the content of the bull of the huIFN beta-1, to create a fusion of the content of the bull o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Multi-class hybrid IFN polypeptides having an AA sequence composed of 2 distinct subsequences are claimed. The plasmids used in the construction of huIFN-alpha-61A-beta-1 hybrid are plasmids palpha61A and pDM101/trp/Deta-1. Assembly of the palpha61A plasmid involed replacing the DNA fragment encoding the 23 AA signal polypeptide of preinterferon with a 120BP EcoRI/Sau3A promoter fragment E.coli trp promoter, operator,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Multi-class hybrid interferon polypeptide(s) - having sequence from interferon-alpha-1 and sequence interferon-beta-1 for restricted activity
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-JUL-1985;
19-JAN-1983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example; Fig 17; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1988-219882/31.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CETU ) CETUS CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-JUL-1985;
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                                                                  proximal to the site of huIFN beta-1, to create a fusion of the genes while preserving the translational reading frame of both
   12 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85US-0755265
83CA-0419758
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RESULT 15
Y27814
                                                                                                                В
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                                                                                                                                Query Match
Best Local Similarity
Matches 5; Conser
                                                              30-JUL-1999 (first entry)
                                                                                   Y27814 standard; Protein; 14 AA
                                                                                                                          10 DFGFPK 15
                                                                                                              2 dfgfpq 7
                                                                                                                                     Conservative
                                                                                                                                          23.5%;
                                                                                                                                     1;
                                                                                                                                         Score 32;
Pred. No.
                                                                                                                                     Mismatches
                                                                                                                                        DB . 48;
                                                                                                                                              9;
                                                                                                                                    0
                                                                                                                                              Length 12
                                                                                                                                    Indels
                                                                                                                                   0
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Human; secreted protein; fusion protein; gene therapy; protein therapy; diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS; cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;

Human secreted protein encoded by gene No. 84

endocrine; metabolism; regulation; malabsorption; gastritis;

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RESULT 11
W24294
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W38080
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DEXX
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequences given in W24292-94 were used in the method of the invention to stimulate an immune response to increase high density lipoprotein (HDL) cholesterol in a mammal exhibiting low levels of serum HDL. These peptides represent immunogenic epitopes of cholesteryl ester transfer protein (CETP). The method utilises the body's own immune system to lower CETP levels, thereby increasing the level of beneficial HDL cholesterol, preferably in serum. The method avoids the problems associated with the repeated administration of drugs which have undesirable side effects. This peptide represents a region of CETP which is common to both human and rabbit proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stimulating an immune response to increase high density lipoprotein - avoids repeated administration of toxic drugs to lower cholesteryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oryctolagus cuniculus
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PPPPY motif containing peptide used to bind WW domains.
                                                                                                           W38080
                                                                                                                                                              W38080 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Immune response;
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                                                     23-APR-1998
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                                                                                                                                                                                                                                                                                                                                                         16 HLLVDFLQSLS 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _
                                                                                                                                                                                                                                                                                                   1 hllvdflqsls 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          transfer protein levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  epitope;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , ws
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                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Carlo DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95US-0482454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96WO-US09143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; high density lipoprotein; HDL; cholesterol; human; cholesteryl ester transfer protein; CETP; rabbit.
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                                                                                                                                                                                                                                                                                                                                                                                                39.0%; >--
100.0%; Pr
0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 53;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
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                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 18;
0.017;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 11;
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                                                                                                                                                                                                                                                                                                                                                                                                              0;
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RESULT P30225

13

0;

P30225

standard; Protein; 12 AA

25-MAY-1992

(first entry)

Hybrid interferon; antiviral; therapy; cancer; tumour.

Sequence of interferon (HuIFN) -alpha-61A around amino

acid 40

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Query Match
Best Local Similarity
Thehes 6; Conserv
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                                 80
                                                                                                                                                                                                                                                                                                                                     found in the proline rich regions of WBP-1 and WBP-2 proteins. Peptides containing this residue have been shown to bind the YAP WW domain, but not the WW domain from dystrophin or to a panel of SH3 domains. Peptides W38068-92 were biotinylated and complexed with alkaline streptavidin, and used in a cross affinity mapping experiment. They were tested for their ability to bind to the 3 MW domains of WBP4 (W36797), which were expressed as glutathione-S-transferase expression proteins. The present peptide, derived from Prkacg (sic), binds to some of the WW domains of the novel protein. The WW domain is a small functional domain. Its name is derived from the observation that two tryptophan residues, 1 in the main terminal portion of the WW domain and 1 in the carboxyl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptide recognition unit; WW domain; cell signalling; growth regulation; cytoskeleton organisation; targeted drug screening; modulator; WW domain interaction; YAP protein; dystrophin.
                                                                                                                                                                                                                                                               terminal portion, are conserved. Most proteins containing WW domains have a function involving cell signalling and growth regulation or the organisation of the cytoskeleton. Polypeptides containing a WW domain a identified by treating a multivalent recognition unit complex that has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Fig 15C; 220pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                useful in targetted drug selection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Identifying cell signalling and growth regulatory polypeptides by reaction with multivalent recognition complex - polypeptides are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-503234/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fowlkes DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-APR-1997;
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                                                                                                                                                               Sequence
                                                                                                                                                                                  identifying those with selective diffusive for containing WW domains are used for targeted drug screening, i.e. identify potential modulators of specific WW domain interactions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CYTO-) CYTOGEN CORP
(UYNC-) UNIV NORTH CA
                                                                                                                                                                                                                                   selective binding affinity for a WW domain, with many polypeptides and identifying those with selective affinity for the complex. Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peptides W38068-92 contain PPPPY-like motifs. The PPPY motif is
   _
                                   3 GCLLLOMDFGFP 14
| |: :| |||
gvliyemavgfp 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 UNIV NORTH CAROLINA
                                                                                                                                                               21
                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kay BK,
                                                                                                                                                               ĀΑ;
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                                                                                        24.3%;
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                                                                       2:
                                                                                          Score 33;
Pred. No.
                                                                       Mismatches
                                                                                      DB
62;
                                                                                                           18;
                                                                       4;
                                                                                                         Length 21;
                                                                       Indels
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RESULT 10
Y91229
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W09966957-A2
                                                                    Homo sapiens
                                                                                                                                                cholesteryl ester
                                                                                                                                                                                                                                                                somatostatin;
                                                                                                                                                                                                                                                                                                                                                                     Promiscuous T-cell epitope; measles virus F protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human cholesteryl transport protein (CETP) peptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-MAY-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Y91.229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Y91229 standard; peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hepatitis B virus (HBV) surface antigen, and sequences Y91144-Y91155 are synthetic epitopes derived from this HBV epitope. Y91156-Y91196, Y9127 and Y91242-Y91244 are antigenic peptides comprising an LHRH sequence joined to a promiscuous Th epitope. Y91197 is the LHRH target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            measles virus F (MVF) protein and sequences Y91122-Y91142, Y91245-Y91246 represent synthetic Th epitopes based on the MVF epitope. Sequence Y91143 represents a promiscuous Th epitope fi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence Y91121 represents a promiscuous T helper epitope from measles virus F (MVF) protein and sequences Y91122-Y91142, Y91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Th can replace carrier proteins and pathogen-derived T helper epitopes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treating allergies or arteriosclerosis. Incorporation of a promiscuous Th (functional in genetically diverse subjects) into an immunogen improves capacity to induce a strong Thelper cell-mediated immune response, resulting in production of antibodies against a target antigen.
                                                                                                                                                                        luteinising hormone releasing hormone; LHRH; contraceptive; anticance somatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMDV; foot and mouth disease virus; immunoglobulin E; JgE; anti-allergic; Plasmodium falciparum; circumsporozoite; antimalarial; CETP;
                                                                                                                                                                                                                                                                                                                                     hepatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11 FGFPKHLLVDFLQSLS 26
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nes 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61.0%; Score 83; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                     antigen; HBV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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red. No. 3.7e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                     immunogenic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ
                                                                                                                                                                                                                                                                                                                                     B-cell epitope;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     NO:107.
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                                                                                                                                                                                                                                                                                         anticancer;
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Query Match Best Local Similarity

58.1%;

Score 79; DB 21; Pred. No. 1.6e-06; Mismatches

Length 16 Indels

16

15;

Conservative

1:

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Cand immunogenic peptides comprising the The pitopes of the invention relates to nover promiscuous Treiper cell epitopes (TII), canding with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a Theiper cell response, specifically against plasmodium falciparum, cholestryl ester transport protein (CETP) or HIV epitopes, but more generally against any pathogen, immunocens may be used for prevention and/or treatment of peptide immunogens may be used for prevention and/or treatment of peptide immunogens may be used for prevention and/or treatment of peptide immunogens may be used for prevention of luteinising hormone releasing hormone (LHRH) for contraception, treatment of hormone releasing hormone (LHRH) for contraception, treatment of a proniscuous This (Innctional in genetically diverse subjects) into an immunogen improves capacity to induce a strong Theiper cell-mediated immune castraction all improves capacity to induce a strong Theiper cell-mediated immune castraction (Innctional Inncompant) in production of antibodies against a target antigen. The sequence 191121 represents a promiscuous Theiper cell-mediated immune castraction in production of antibodies against a target antigen. The perfect of the production of antibodies against a target antigen. The perfect of the production of antibodies against a target antigen. The perfect of the pitopes from the measures virus F (WF) protein and sequences 791122-791142, 791226 and 79124-79124 are presents a promiscuous Theiper epitope from the peptides virus F (WF) protein and sequences 791142, 791226 and 79124-79124 are antigenic peptides comprising an LHRH target sequence 19114, and 191201-791207 are antigenic peptides comprising subject of the WF The peptides comprising somatostation and 791201-791207 are antigenic peptides comprising stream the perfect of the promoce of the perfect of the pe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 10; Page 50; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or human immune deficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New artificial T helper cell epitope and derived immunogens with target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antigenic site,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-160564/14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UNBI-) UNITED BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             invention relates to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for immunization against e.g. malaria, arteriosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         novel promiscuous T helper cell epitopes (Th),
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CETP; cholesteryl-ester transfer protein; recombinant DNA antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration; pro-atherogenic dyslipoproteinaemia.
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cholesteryl ester transferase protein (CETP).
The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lesser transfer of cholesteryl esters from high density lipoprotein (HDL)
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                                                                                                                This sequence represents an immunogenic fragment of the human
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                                                                                                                                                                            Disclosure; Page 88;
                                                                                                                                                                                                                              New recombinant DNA vaccines
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Plasmodium falciparum; circumsporozoite; antimalarial; CETP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                somatostatin; growth promotion; CD4 receptor; H foot and mouth disease virus; immunoglobulin E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Promiscuous T-cell epitope; measles virus F protein; MVF;
hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human cholesteryl transport protein (CETP) peptide,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          luteinising hormone releasing
                                                                                                                                                                 Claim 10;
                                                                                                                                                                                      or human immune deficiency virus
                                                                                                                                                                                                 New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis
                                                                                                                                                                                                                                      WPI; 2000-160564/14.
                                                                                                                                                                                                                                                                                  (UNBI-) UNITED BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                          20-JUN-1998;
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The invention relates to novel promiscuous T helper cell epitopes (Th), and immunogenic peptides comprising the Th epitopes of the invention along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport protein (CETP) or HIV epitopes, but more generally against any pathogen, immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of infections (HIV, foot-and-mouth disease or malaria); for cancer immunotherapy; for inhibition of the action of lutelnising hormone releasing hormone (LHRH) for contraception, treatment of hormone-dependent cancer, prevention of boar taint in meat, and immunocastration); for promoting the growth of animals; or for

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Query Match
Best Local Similarity
Thes 23; Conserv
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CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration; pro-atherogenic dyslipoproteinaemia.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immunocastration); for promoting the growth of animals; or for treating allergies or arteriosclerosis. Incorporation of a promiscuous Th (functional in genetically diverse subjects) into an immungen Improves capacity to induce a strong Thelper cell-mediated immune response, resulting in production of antibodies against a target antigen. Th can replace carrier proteins and pathogen-derived Thelper-peptopes. Sequence Y91121 represents a promiscuous Thelper epitope from the measles virus F (MVF) protein and sequences Y91122-Y91142, Y91226 and Y91245-Y91246 represent synthetic Th epitopes based on the MVF Thelper-peptopes. Sequence Y91141 represents a promiscuous Theptope from the septope. Sequence Y91141 represents a promiscuous Theptope from the most of the MVF Thelper-peptopes.
                                                                                                                                                                                                                                                                                                                                              Rabbit CETP immunogenic fragment
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92.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 117; DB 2
Pred. No. 2e-12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 21; Length 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                         HDL;
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipopy tein (HDL). The method can provide an autogenic immunological process for lessening the HDL cholesterol concentration of a mammal whose blood also contains CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios. The method can have an effect that lasts for months as compared to the
                                                                                                                                                             CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; HDL; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration;
                                                                                                                          Oryctolagus sp.
        (MONS ) MONSANTO CO
                                                      17-SEP-1998;
                                                                              01-APR-1999
                                                                                                                                                  pro-atherogenic
                                                                                                                                                                                                            Rabbit CETP immunogenic fragment.
                                                                                                                                                                                                                                    08-JUL-1999
                                                                                                                                                                                                                                                            Y13815;
                                                                                                                                                                                                                                                                                 Y13815 standard; peptide; 22 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          short-term
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents an immunogenic fragment of the rabbit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New recombinant DNA vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oryctolagus sp
                                19-SEP-1997;
                                                                                                   WO9915655-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cholesteryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 73; 99pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-276984/23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                   5 LLLQMDFGFPKHLLVDFLQSLS
                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          effects of the small molecule drugs now available
                                                                                                                                                                                                                                                                                                                                                                                                                                                   22 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ester
                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                    (first entry)
                                97US-0934367
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                                                      98WO-US19366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US19366
                                                                                                                                                  dyslipoproteinaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             transferase protein (CETP)
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                                                                                                                                                                                                                                                                                                                                                                                                     81.6%;
100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                     Score 111;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     1.5e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                DB 20;
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RESULT
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Best Local S
Matches 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of human liver mature cholesteryl ester transfer protein (CETP) (see also W06127) is involved in a neutral lipid binding or a transfer activity of CETP. It can be linked to a universal or broad range immunogenic T-cell epitope, such as that found at amino acids 830-843 of tetanus toxold protein, to produce a synthetic vaccine (see also W06129) that elicits an immune response against endogenous CETP activity, thereby treating or preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cholesteryl ester transfer protein B cell epitope linked to T cell epitope - used to generate vaccine to regulate CETP activity for decreasing the risk of developing a cardiovascular disease e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cardiovascular disease, such as atherosclerosis. It may incorporated into a multivalent vaccine (see also W06131) including another CETP B-cell epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A B-cell epitope (W06128) comprising the C-terminal 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 5; Page 41; 72pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atherosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1996-506103/50.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TCEL-) T CELL
                                                                                                                                                                                                                          antibody production; cholesteryl ester tra
high density lipoprotein; HDL cholesterol
                                                                                                                                                                                                                                                                                               08-JUL-1999
                                                                                                                                                                                                                                                                                                                      Y13801;
                                                                                                                                                                                                                                                                                                                                              Y13801 standard;
                      WPI;
                                                                                                                                           01-APR-1999
                                                                                                                                                                  W09915655-A1
                                                                                                                                                                                       Oryctolagus sp
                                                                                                                                                                                                               pro-atherogenic
                                                                                                                                                                                                                                                                        Rabbit CETP immunogenic fragment
                                                                                           19-SEP-1997;
                                                                                                                   17-SEP-1998;
New recombinant DNA vaccines
                                                                    (MONS ) MONSANTO CO
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                                                                                                                                                                                                                                                                                                                                                                                                      DGCLLLQMDFGFPKHLLVDFLQSLS 26
                      1999-276984/23
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                                                                                                                                                                                                                                   cholesteryl-ester transfer protein; recombinant DNA vaccine; ddy production; cholesteryl ester transfer; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                             Needleman
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                                                                                                                                                                                                                                                                                                (first
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                                                                                           97US-0934367
                                                                                                                   98WO-US19366
                                                                                                                                                                                                                dyslipoproteinaemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Thomas
                                                                                                                                                                                                                                                                                                                                             peptide;
                                                                                                                                                                                                                                                                                                entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                86.0%;
92.0%;
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Pred. No. 2e-12;
                                                                                                                                                                                                                                                                                                                                                                                                        26
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 17;
                                                                                                                                                                                                                               concentration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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RESULT
Y91228
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesterol concentration of a mammal whose blood also contains CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios. 'Method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence represents an immunogenic fragment of the cholesteryl ester transferase protein (CETP). The invention relates to recombinant DNA vaccines that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                                                           hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope; lutelnising hormone releasing hormone; LHRH; contraceptive; anticance sommatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMDV; foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; plasmodium falciparum; circumsporozoite; antimalarial; CETP; cholesteryl ester transport protein; anti-arteriosclerotic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y91228 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                               Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human cholesteryl transport protein (CETP) peptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Y91228;
                                                                                                         New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis or human immune deficiency virus –
                                                                                                                                                                                                                                                                                                                                     W09966957-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Promiscuous T-cell epitope; measles virus F protein;
                                                                                                                                                                                                                                                                                 21-JUN-1999;
                                                                                                                                                                                                                                                                                                           29-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                 Claim 10;
                                                                                                                                                                   WPI; 2000-160564/14.
                                                                                                                                                                                                                         (UNBI-) UNITED
                                                                                                                                                                                                                                                      20-JUN-1998;
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23; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page
                                                                                 Page 49; 129pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                           BIOMEDICAL INC
                                                                                                                                                                                                                                                      98US-0100412
                                                                                                                                                                                                                                                                                  99WO-US13975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptide;
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92.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 117; DB 2
Pred. No. 2e-12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fragment of the rabbit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                B-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              contain DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    anticancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                epitope;
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The invention relates to novel promiscuous T helper cell epitopes (Th), and immunogenic peptides comprising the The epitopes of the invention along with B cell epitopes. The The epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport

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RESULT
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Best Local
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The invention relates to novel promiscuous T helper cell epitopes (Th), and immunogenic peptides comprising the Th epitopes of the invention along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport protein (CETP) or HIV epitopes, but more generally against any pathogen, immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This sequence represents an immunogenic fragment of the rabbit cholesteryl ester transferase protein (CETP). The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesterol concentration of a mammal whose blood also contains CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
                                                                                                                                                                                                                                                                                                  Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Promiscuous T-cell epitope; measles virus F protein; MVF; hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope; luteinising hormone releasing hormone; LHRH; contraceptive; anticance; somatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMDV; foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; plasmodium falciparum; circumsporozoite; antimalarial; CETP; chlorotein; circumsporozoite; antimalarial; CETP;
                                                                                                                                                                                                                                                                                                                                                                               New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human cholesteryl transport protein (CETP) peptide, SEQ ID NO:109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-160564/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UNBI-) UNITED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cholesteryl ester
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Y91231 standard; peptide; 26
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                                                                                                                                                                                                                                                                                                                                                           human immune deficiency virus
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                                                                                                                                                                                                                                                                                           62; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOMEDICAL INC
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Pred. No. 1.7e-15;
; Mismatches 0;
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                                                                                                                                                   CC Th (functional in genetically diverse subjects) into an immunogen CC improves capacity to induce a strong Thelper cell-mediated immune CC response, resulting in production of antibodies against a target antigen. CC Theory replace carrier proteins and pathogen-derived Thelper epitopes. CC Sequence Y91121 represents a promiscuous Thelper epitope from the cepitope. Sequence Y91143 represents a promiscuous The pitope from the cepitope. Sequence Y91143 represents a promiscuous The pitope from the control of the c
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Sequence
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В S

Ş Matches Query Match Best Local Similarity Conservative 100.0%; Score 136; DB 21; 100.0%; Pred. No. 1.7e-15; 0, Mismatches Length Indels 26; 0; Gaps 0

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W06128 standard; Peptide; 26
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07-FEB-1997

(first entry)

В

Human cholesteryl ester transfer protein C-terminal B-cell epitope

Cholesteryl ester transfer protein; CETP; antigen; vaccine cardiovascular disease; atherosclerosis; B-cell

WO9634888-A1

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Title:
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SUMMARIES

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ALIGNMENTS

Y13802 RESULT CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; HDL; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration; pro-atherogenic dyslipoproteinaemia. Y13802; Y13802 standard; peptide; 26 AA. Rabbit CETP immunogenic fragment. 08-JUL-1999 Claim 15; Page 94; 99pp; English WPI; 1999-276984/23 Glenn K, (MONS) MONSANTO CO. 19-SEP-1997; 17-SEP-1998; 01-APR-1999. W09915655-A1. Oryctolagus sp. New recombinant DNA vaccines Needleman P; (first entry) 97US-0934367. 98WO-US19366

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RY *A novel C-ternical domain in the thyroid bormone receptor selectively RT mediates thyroid bormone inhibition.*

So smoteroe 16 AA; 1920 MH; 79881A4936822F CRC64;

Query Match 21.0%; Score 21.0% 4. Length 16; Bast Local Similarity 40.0%; Pred No. 4.le+03; Matches 4; Conservative 2; Mismatches 4; Indels 0; Gaps 0; Cy 11 KLEHILLDFQ 20

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Search completed: December 21, 2000, 08:35:36

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Submitted (SEP-1993)
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STRAIN-G-37;
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Bacteria; Firmicutes; Bacillus/Clostridium group; Mollicutes;
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BETA-ISOFORM THYROID HORMONE RE
HOMO Sapiens (Human).
Ekkaryota; Metazoa; Chordata; C
Mammalia; Eutheria; Primates; C
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Q9UD41;
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Q1-MAY-2000
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Yoshimura K., Uemura J., Seki T., Os

"Construction of a promoter-probe ve
by using the trpD+ gene of Bacillus
J. Bacteriol. 159:905-912(1984).

EMBL: K02661: AAB05353.1:
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SEQUENCE 7 AA;
 MEDLINE; 95105146. Flynn T.R., Holler Tollin S., Hegarty
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 85006754.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Murphy W.J., Thomerson J.E., Collier G.E.;

"A molecular phylogency of Neotropical aplochei
(Cyprinodontiformes, Rivulidae).";
Submitted (MAY-1997) to the EMBL/GenBank/DDBJ
EMBL, AF002591; AAD01074.1;
                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bacillus amyloliquefaciens.
Bacteria; Firmicutes; Bacil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bacillus/Staphylococcus group;
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Atherinomorpha;
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|: |||
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Hollenberg A. Hegarty M.K.,
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                                                                       Chordata;
Primates;
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 Wondisford
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Pred. No.
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Pred. No. 2.6e+03;
2; Mismatches 4
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                                                                     Craniata; Vertebrata; Catarrhini; Hominidae;
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l aplocheiloid
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Best Local Similarity 28.6
Natches 4; Conservative
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Q9R5Q6;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
2-HALOBENZOATE 1,2-DIOXYGENASE COMPONENT A BETA SUBUNIT.
Burkholderia cepacia (Pseudomonas cepacia).
Burkholderia epacia; beta subdivision; Burkholderia
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SEQUENCE
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Q9UQJ2;
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01-NOV-1998 (TrEMBLrel.
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EMBL; U30472; AAC44579.1;
NON_TER 18 18
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                                                                                                                                                                                                                                                                                                                                                             Fetzner S., Muller R., Lingens F.;
"Purification and some properties of 2-halobenzoate 1 two-component enzyme system from Pseudomonas cepacia J. Bacteriol. 174:279-290(1992).
SEQUENCE 14 AA; 1544 MW; 0BC0478DE855A33B CRC64;
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Bacteria; Proteobacteria;
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Immonen T., Saris P.E.J.;
"Characterization of the nisFEG ope
Lactococcus lactis subsp. lactis Ni
DNA Seq. 9:263-274(1998).
EMBL; AJ000993; CAA04441.1; -.
                                                                                                                                                                                                                                                                                                                                                           Q9RLU4;
Q9RLU4;
Q9RLU4;
01-MAY-2000
01-MAY-2000
01-MAY-2000
NISG PROTEIN
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Q9R1F0;
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01-MAY-2000
01-MAY-2000
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DNA Seq.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eukaryota; Metazoa; Chordata; Craniata; Hominidae;
                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN-N8; TRANSPOSON=TN5481;
Immonen T., Wahlstroem G., Takala
"Evidence for a mosaic structure
                                                                                                                                                                                                                                                                                                                           Lactococcus lactis. Plasmid pLEB513. Bacteria; Firmicute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (NOV-1998) to the EMBL; AF104935; AAD21961.1; NON_TER 15 15 SEQUENCE 15 AA; 1806 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Garibay-Tupas J.; "Characterization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM
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Bacteria; Pro
Escherichia.
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01-NOV-1998
SPOT 42 RNA.
                                                                                                         Q9SBA4;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Q18 KDA COELIAC SERUM-REACTIVE GLYCOPROTEIN (FRAGMENT).
Secale cereale (Rye).
Secale cereale (Rye).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Slymagnoliophyta; Liliopsida; Poales; Poaceae; Secale.
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EMBL; X01
SEQUENCE
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Kojima K.,
            MEDLINE; 96283789.
Rocher A., Calero M.,
"Identification of ma
                                                                                                                                                                                                                                                                  Q9S8A4
proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "A small, unstable RNA molecule Nuclectide sequence analysis.";
J. Mol. Biol. 131:573-592(1979).
EMBL; X01895; CAA25985.1;
SEQUENCE 15 AA; 1725 MW; 5A5
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Sahagan B.G., Dahl
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01-NOV-1996
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SEQUENCE 19 AA; 2294 MW; F025B1E02C50C419 CF
                                                                        SEQUENCE
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"Carbohydrate-binding
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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              M., Soriano F., Meno
major rye secalins
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Pred. No. 1.2e
2; Mismatches
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actyla; Ruminantia; Pecora;
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1.2e+03
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Garibay-Tupas J.;
"Characterization of the huma
Submitted (NOV-1998) to the E
EMBL; AF104934; AAD21967.1; -
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Q9R583;
Q1-MAY-2000
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O1-MAY-2000 (TrEMBLrel. 13, Last ann
PRORELAXIN HI PRECURSOR (FRAGMENT).
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MEDLINE; 93307625.

Griffiths E., Stevenson P., Byfield P., Ala'Aldeen Borriello S.P., Holland J., Parsons T., Williams P. "Antigenic relationships of transferrin-binding property of the second beamonth."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (Human).
Eukaryota; Metazoa; C
Mammalia; Eutheria; F
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SEQUENCE 18 AA; 1999 MW; FCOFIFBOA86C77C4 CRC64;
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                                                                                                                                                                                                                                                                                   SEQUENCE
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Similarity 41.7%;
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Pred. No. 1e+0
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1 (FRAGMENT).
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EMBL/GenBank/DDBJ databases.
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Pred. No. 1.4e
2; Mismatches
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1.4e+03;
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11.880 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

19	18	17	16	15	14	13	12	11	10	9	80	7	6	ъ	4	ω	2	1	Result No.	
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ALIGNMENTS

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RESULT QU24144
ID 200
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DT 01
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Matches 7; Conserv
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O02414:
01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
                                                                                                                                                                                                                                                                                       Curr. Genet. 27:536-540(1995).
EMBL; S79674; AAB35350.1; -
NON_TER 1 1
SEQUENCE 18 AA; 1891 MW; E1
                                                                                                                                                                                                                                                                                                                                                                 Gouka R.J., Hessing J.G., Stam H., Musters W., Hondel C.A.; "A novel strategy for the isolation of defined pyrG mutants and the development of a site-specific integration system for Aspergillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aspergillus awamori.
Eukaryota; Fungi; Ascomycota; Eurotiales;
anamorphic Trichocomaceae; Aspergillus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PYRG
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OROTIDINE-5'-MONOPHOSPHATE DECARBOXYLASE (FRAGMENT).
PYRG.
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 96031709.
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
CA(2+)-DEPENDENT CARBOHYDRATE-BINDING PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                      awamori.";
                                                                Q9TRL8;
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                                                                              PRELIMINARY;
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pred. No. 9.4e+02;
1; Mismatches 9;
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Page 6

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RESULT
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NON_TER
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                                                                                                                                                                                                                                                                                                                       "Identification of the promoter and the transcriptional start site of the spoVA operon of Bacillus subtilis and Bacillus licheniformis."; J. Gen. Microbiol. 137:527-531(1991).
                                                                                                                                                                                  EMBL; X53991; CAA37938.1;
                                                                                                                                                                                                                                       use by non-profit institutions as long modified and this statement is not removed
                                                                                                                                                                                                                                                                                                                                                                Moldover B., Piggot P.J., Yudkin M.D.;
                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE; 91237317.
                                                                                                                                                                                                                                                                                                                                                                                                                        Bacteria; Firmicutes; Bacillus/Clostridium group; Bacillus/Staphylococcus group; Bacillus.
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S23423; S23423.
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ERQVFIRL
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Similarity 50.0%;
3; Conservative
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AL22_HORSE
AC P81217;
DT 15-JUL-1998
DT 15-JUL-1998
DT 15-JUC-1998
DT 15-JUC-1998
DE DANDER MAJO:
OS Equus caball
OC Eukaryota; h
OC Mammalia; E
RN [1]
RP SEQUENCE.
RC TISSUE=SKIN;
RR SEQUENCE.
RC TISSUE=SKIN;
RX MEDLINE; 983
RA Bulone V., I
RT "Separation
RT electrophoro
RT Equ c 2.0107
RL ELT. J. Biooc
CC -!- FTM: N---
CC -!- SIMILAR:
CC -!- SIMILAR:
CC -!- SAME PROSITE; PSU
DR INTERPRO; II
DR PROSITE; PSU
KW Transport; J
FT NON_TER
SQ SEQUENCE
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Search completed: December Job time: 438 sec
                                                                                                                                                                                      Query Match
Best Local :
                                                                                                                                                                   Matches
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"Separation of horse dander allergen proteins by two-dimensional electrophoresis -- molecular characterisation and identification equ c 2.0101 and Equ c 2.0102 as lipocalin proteins.";
Eur. J. Biochem. 253:202-211(1998).
-!- SUBCELLULAR LOCATION: SECRETED (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
DANDER MAJOR ALLERGEN EQU C 2.0102 (FRAGMENT)
Equus caballus (Horse).
                                                                                                                                                                                                                                                                                 Transport; Lipocalin; Glycoprotein; Allergen NON_TER 19 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=SKIN;
                                                                                                                                                                                                                                                                                                                    INTERPRO; IPRO00566; -.
PROSITE; PS00213; LIPOCALIN; PARTIAL.
                                                                                                                                                                 Local Similarity les 3; Conserv
                                                                                           7
                                                                                                                              4 QASYSQ
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PTM: N-GLYCOSYLATED.

MISCELLANEOUS: PREDOMINANT ALLERGEN OF HORSE DANDER.

SIMILARITY: BELONGS TO THE LIPOCALLN FAMILY.

SIMILARITY: BELONGS TO THE LIPOCALLN FAMILY.
                                                                                                                                                                                                                                                                                                                                                         CAUTION: C 2.0101 AND SAME PROTEIN.
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                   2000, 08:32:55
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                                                                                                                                                                                      Score 18; DB 1;
Pred. No. 4.1e+03;
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MEDLINE, 98361026.
Rogers A.H., Gunadi A., Gully N.J., Z.
"An aminopeptidase nutritionally impoi
"An entropeptidase nutritionally impoi
nucleatum.";
Microbiology 144:1807-1813(1998).
-!- FUNCTION: CLEAVES A WIDE RANGE OF
-!- COPACTOR: COBALT.
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P19915;
P19915;
Ol-FEB-1991 (Rel. 17, Created)
Ol-FEB-991 (Rel. 17, Last sequence update)
Ol-DEC-1992 (Rel. 24, Last annotation update)
CARBON MONOXIDE DEHYDROGENASE SMALL CHAIN (EC 1.2.99.2) (FRAGMENT).
                                                                                                                                                                                                                        Oxidoreductase; Molybdenum.
NON_TER 20 20
SEQUENCE 20 AA; 2155 MW;
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Arch. Microbiol. 152:335-341(1989).
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Bacteria; Proteobacteria; beta subdivision;
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SUBUNIT: CONSISTS OF
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                                                                                                   SEQUENCE FROM N.A.

MEDLINE: 92316212.

Scaramuzzi C.D., Stokes H.W., Hiller R.G.;

"Characterisation of a chloroplast-encoded secy homologue and atpH

from a chromophytic alga. Evidence for a novel chloroplast genome

from a chromophytic alga. Evidence for a novel chloroplast genome

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01-DEC-1992 (Rel. 24, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
ATP SYNTHASE A CHAIN (EC 3.6.1.34) (SUBUNIT I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SUBUNIT: HEXAMER CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS (ALPHA, BETA, & GAMMA), LINKED TO EACH OTHER BY DISULFIDE BONDS.
-!- MISCELLANEOUS: CONVERSION OF FIBRINGEN TO FIBRIN IS TRIGGERED BETHROMBIN, WHICH CLEAVES FIBRINOPEPTIDES A AND B FROM ALPHA & BETCHAINS, AND THUS EXPOSES THE N-TERMINAL POLYMERIZATION SITES RESPONSIBLE FOR THE FORMATION OF THE SOFT CLOT.
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"Studies on fibrinopeptides from mammals.";
Acta Chem. Scand. 19:1789-1791(1965).
-i- FUNCTION: FIBRINOGEN HAS A DOUBLE FUNCTION: YIEL
POLYMERIZE. INTO FIBRIN AND ACTING AS A COFACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Equus caballus (Horse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
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                                                   SUBCELLULAR LOCATION: THYLAKOID MEMBRANE.
                               SIMILARITY:
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                            CHAIN FAMILY
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RESULT
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Best Local
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Best Local (
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                                                                                                                                                                                                                                          NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Electrophoresis 18:2795-2802(1997).

-I- FUNCTION: TRANSFER OF ELECTRONS FROM NADH TO THE RESPIRATORY
CHAIN. THE IMMEDIATE ELECTRON ACCEPTOR FOR THE ENZYME IS BELIEVED
TO BE UBLQUINONE. COMPONENT OF THE FLAVOPROTEIN-SULFUR (FP)
FRAGMENT OF THE ENZYME.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-OCT-1996 (Rel. 34, Created)
15-JUL-1998 (Rel. 36, Last sequ
15-JUL-1999 (Rel. 38, Last anno
NADH-GBIQUINONE OXIDOREDUCTASE
(EC 1.6.99.3) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dunn M.J., Corbett J.M., Wheeler C.H.; "HSC-2DPAGE and the two-dimensional ge dog heart proteins.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata; C
Mammalia; Eutheria; Carnivora;
                                                                                                                                                                                                                                                             PROSITE; PS01099; COMPLEX1_24K; I
Oxidoreductase; NAD; Ubiquinone;
NON_TER 11 11
                                                                                                                                                                                                                                                                                                                   HSC-2DPAGE; P49820; DOG. INTERPRO; IPRO02023; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 98163340.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Microsome;
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                                                                                                                                                                                                                                                                                                                                                                                              CATALYTIC ACTIVITY: NADH + UBIQUINONE = NAD(+) + UBIQUINOL. COFACTOR: 2FE-2S IRON-SULFUR CLUSTER N 1B. SUBUNIT: COMPLEX I IS COMPOSED OF ABOUT 40 DIFFERENT SUBUNITS THIS IS A COMPONENT OF THE FLAVOPROTEIN FRACTION.

SUBCELLULAR LOCATION: MATRIX AND CYTOPLASMIC SIDE OF THE
                                                                                                                                                                                                                                                                                                                                                           MITOCHONDRIAL INNER MEMBRANE SIMILARITY: BELONGS TO THE CO
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Last annotation
REDUCTASE 24 KDA
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1.5e+03;
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Canis.
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PA21_MICEM
P25072;
01-MAY-1992
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P31010;
01-JUL-1993
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Smith).";
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01-JUL-1993 (Rel.
01-JUL-1993 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hydrolase; Lipid degradation; Calcium; NON_TER 12 12 SEQUENCE 12 AA; 1398 MW; CC21992AR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biochem. J. 179:603-606(1979).

-i-FUNCTION: PAZ CATALYZES THE CALCIUM-DEPENDENT
-i-FUNCTION: PAS IN 3-SN-PHOSPHOGLYCERIDES.

-i-CATALYTIC ACTIVITY: PHOSPHATIDYLCHOLINE + H(2)
PHOSPHOCHOLINE + A FATTY ACID ANION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Possani L.D., Alagon A.C., Fletcher P.L. Jr., Varela M.J., Jul
"Purification and characterization of a phospholipase A2 from
venom of the coral snake, Micrurus fulvius microgalbineus (Bro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2-ACYLHYDROLASE) (FRAGMENT).
Micrurus fulvius microgalbineus (Mexican Eukaryota, Metazoa; Chordata; Craniata; V Lepidosauria; Squamata; Scleroglossa; Sez
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-1992 (Rel. 22, Created)
01-MAY-1992 (Rel. 22, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
PHOSPHOLIPASE A2 ISOZYME 1 (EC 3.1.1.4) (PHOSPHATIDYLCHOLINE
                                                                               Venom; Neurotoxin.
NON_TER 19
SEQUENCE 19 AA;
                                                                                                                           Rezende L. Jr., Cordeiro M.N., Oli
"Isolation of neurotoxic peptides
spider Phoneutria nigriventer.";
Toxicon 29:1225-1233(1991).
                                                                                                                                                                                                                     Phoneutria nigriventer (Brazilian armed spider).
Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida; Araneae;
Araneomorphae; Entelegynae; Lycosoldea; Ctenidae; Phoneutria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-VENOM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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                                                                                                                   PIR;
                                                                                                                                                                                                                                                         NEUROTOXIN TX3 (FRAGMENT)
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PROSITE; PS00119; PA2_ASP; PARTIAL.
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                                                                                                                                                                                      TISSUE=VENOM
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3; Conserv
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                      19.0%;
Llarity 100.0%;
Conservative
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60.0%;
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Last annotation update)
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                      Score 19; DB Pred. No. 2.8 0; Mismatches
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Pred. No. 1.7e+03
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the venom
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                                    DB 1; Lo
2.8e+03;
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Best Local S
Matches 4
               Kieselbach T., Bystedt M., Schroeder W.P.;
Submitted (MAY-2000) to the SWISS-PROT data bank.
-i- SUBCELLULAR LOCATION: CHLOROPLAST THYLAKOID MEMBRANE LUMEN
                                                                                                                                                                                                             01-OCT-2000 (Rel. 40, Created)
01-OCT-2000 (Rel. 40, Last sequence update)
01-OCT-2000 (Rel. 40, Last annotation update)
THYLAKOID LUMENAL 18 KDA PROTEIN (P18) (FRAGM
-!- SUBCELLULAR LOCATION: Chloroplast; Thylakoid mer
                                                                                                                       Spinacia oleracea (Spinach).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta;
Magnoliophyta; eudicotyledons; core eudicots; Caryopl
Caryophyllales; Chenopodiaceae; Spinacia.
                                                                                                                                                                                                                                                                                                                                                  SPIOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "A new mast cell degranulating peptide venom of Polistes Jadwigae.";
Biomed Res. 1:185-187(1980)
1- FUNCTION: MAST CELL DEGRANULATING THAT COUPLE TO PHOSPHOLIPASE C.
PIR: A01780; OMWAPP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P01517;
21-JUL-1986 (Rel. 01, Creat
21-JUL-1986 (Rel. 01, Last
01-AUG-1992 (Rel. 23, Last
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEMS Microbiol. Lett. 172:9-13(1999).
Outer membrane: Virulence.
NON_TER 20 20
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Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Hymenoptera; Apocrita; Ac
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"Identification of Bordetella
                                                                                                                                                                                                                                                                                                                           TL18_SPIOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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Vespoidea; Vespidae;
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RES 14 14 AMIDATION.
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A., Rossi J.P.F.
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STANDARD,
CPBCB-1994 (Rel. 28, Created)
T 01-FEB-1994 (Rel. 28, Last sequence update)
T 01-FEB-1994 (Rel. 28, Last sequence update)
T 30-MAY-2000 (Rel. 39, Last annotation update)
T 30-MAY-2000 (Rel. 39, Last annotation update)
CTOCHROME P450IIB (EC 1.14.14.1) (FRAGMENT).
OS Cavia porcellus (Guinea pig).
CC Eukaryota; Metazoa; Chordata; Craniata; Vertebr;
CC Caviania: Eutheria; Rodentia; Hystricognathi; C
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SEQUENCE
       "Purification of a cytochrome P450 isozyme belonging to a subfami of p450 IIB from liver microsomes of guinea pigs."; Biochem. Biophys. Res. Commun. 172:607-613 (1990).

-I- FUNCTION: CYTOCHROMES P450 ARE A GROUP OF HEME-THIOLATE MONOOXYGENASES. IN LIVER MICROSOMES, THIS ENZYME IS INVOLVED NADPH-DEPENDENT ELECTRON TRANSPORT PATHWAY. THIS ISOZYME IS A
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P80717;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LINKAGES IN XYLANS.
-!- PATHWAY: XYLAN DEGRADATION
-!- SIMILARITY: BELONGS TO CEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Adamsen A.K., Jacobsen S., Ahring B.K.; Submitted (OCT-1996) to the SWISS-PROT -:- CATALYTIC ACTIVITY: ENDOHYDROLYSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
ENDO-1,4-BETA-XYLANASE B (EC 3.2.1.8) (XYLANASE
                                                                                             Narimatsu
                                                                                                                     STRAIN-HARTLEY;
                                                                                                                               SEQUENCE, AND CHARACTERIZATION
                                                                                  Yoshimura H.;
                                                                                                          MEDLINE; 91054472.
                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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Hystricognathi; Caviidae; Cavia.
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ATPI_PAVLU
SP51_BACLI
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RESULT 13
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C:Species: Homo sapiens (man)
C:Species: Homo sapiens (man)
C:Apecies: Homo sapiens (man)
C:Accession: B45895
R;Lee, K.P.; Taylor, C.; Petryniak, B.; Turka, L.A.; June, C.H.; Thompson, C.B.
J. Immunol. 145, 344-352, 1990
A;Title: The genomic organization of the CD28 gene. Implications for the regulation of A;Reference number: A45895; MUID:90293482
A;Accession: B45895
                                                                                                                                                                                                                                                                                                                                               R; Makino, N.; Kimura, S.
Eur. J. Blochem. 173, 423-430, 1988
A; Title: Subunits of Panulirus japonicus hemocyanin. 1. Isolation
A; Reference number: $00492; MUID:88196131
A; Accession: $00495
A; Molecule type: protein
A; Residues: 1-19 <MAK>
C; Superfamily: hemocyanin
C; Keywords: copper; hemolymph; hexamer; oxygen carrier
                                                                                                   RESULT 15
S00493
                     hemocyanin chain Ib - Japanese spiny lobster (fragment)
C:Species: Panulirus Japonicus (Japanese spiny lobster)
C:Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 01-Aug-1997
C:Accession: S00493
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C:Species: Panulirus japonicus (Japanese spiny lobster)
C:Date: 31-Dec-1988 #text_change 01-Aug-1997
C:Accession: 500495
C:Accession: 500495
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A:Molecule type: mrNA
A:Residues: 1-16 <LEED
A:Cross-references: GB:M37813
C:Keywords: glycoprotein
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Best Local Similarity 5/.1
"-" hes 4; Conservative
                                                                                                                                                                                                                                                         Query Match 22.0%; Score 22; DB 2; I
Best Local Similarity 100.0%; Pred. No. 2.3e+03;
Matches 4; Conservative 0; Mismatches 0;
                                                                                                                                                                               16 HLLD 19
                                                                                                                                                                                                                       15 HLLD 18
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||||:| :
3 VQAAYQK 9
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N.; Kimura, S.
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50.0%;
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Pred. No. 1.7e+03;
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Pred. No. 1.
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1.9e+03;
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Eur. J. Biochem. 173, 423-430, 1988
A;Title: Subunits of Panulirus japonicus hemocyanin. 1. Isolation and properties A;Reference number: S00492; MUID:88196131
A;Accession: S00493
A;Molecule type: protein A;Residues; 1-20 <AMAK>
C;Superfamily: hemocyanin
C;Keywords: copper; hemolymph; hexamer; oxygen carrier
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                                                                 Query Match
Best Local Similarity
Matches 4; Conser
                               15 HLLD 18
16 HLLD 19
                                                               ch 22.0%;
l Similarity 100.0%;
4; Conservative (
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Pred. No. 2.4e+03
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Search completed: December 21, Job time: 268 sec

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A;Reference number: $10452
A;Accession: $10452
A;Mccele turc
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C:Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 09-Sep-1997
C:Accession: S10452
R.van Gorcom, R.F.M.; Boschloo, J.G.; Kuijvenhoven, A.; Lange, J.; Bos, C.J submitted to the EMBL Data Library, March 1990
                                                                                                                                                                                                                                                                                                                       T-cell receptor alpha chain (17) - mouse (fragment)

C;Species: Mus musculus (house mouse)

C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997

C;Accession: PHO786

R;Casanova, J.L.; Romero, P.; Widmann, C.; Kourilsky, P.; Maryanski, J.L.

J. Exp. Med. 174, 1371-1383, 1991
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R;Genersch, E.; Eckerskorn, C.; Lottspeich, F.; Herzog, C.; Kuehn, K.; Poeschl, E. EMBO J. 14, 791-800, 1995
A;Title: Purification of the sequence-specific transcription factor CTCBF, involved A;Reference number: S54272; MUID:95188883
A;Accession: S54272
A;Status: preliminary
                                                                                                                                                           A; Molecule type: mRNA
A; Residues: 1-13 <CAS>
A; Cross-references: EMBL:X60889
A; Experimental source: T lymphocyte
C; Keywords: T-cell receptor
                              δÃ
                                                                                                                                                                                                                                                      A;Title: T cell receptor genes in a series of class I major histocompatibility complex-allelic exclusion and antigen-specific repertoire.
A;Reference number: PH0746; MUID:92078846
A;Accession: PH0786
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C;Date: 27-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 17-Mar-1999
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A; Residues: 1-18 < VAN>
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Best Local S
Matches 3
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 SAYANKMIF 12
                                  ASYSOKKLF 13
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Similarity 33.3%;
4; Conservative
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6; Conservative
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                                                                        Conservative
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Library, March 1990
                                                                      Score 22; DB Pred. No. 1.6e
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Pred. No. 1.4e
1; Mismatches
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7;
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1.6e+03;
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avenin alpha-2 - oat (fragment)
N,Alternate names: CIP-3; coeliac immunoreactive protein
C;Species: Avena sativa (oat)
C;Date: 19-Mar-1997 #sequence_revision 24-Jul-1998 #text_
C;Accession: S29209
                                                                                                                                                                                                           hemoglobin beta chain thalassemia mutant Portuguese - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 02-Jul-1996 #sequence_revision 11-Jul-1996 #text_change 20-Apr-2000
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S29209
                                                                                                    R;Oner, R.; Oner, C.; Wilson, J.B.; Tamagnini, G.P.; Ribeiro, L.M.; Huisman, T.H. Br. J. Haematol. 79, 306-310, 1991
A;Title: Dominant beta-thalassamia trait in a Portuguese family is caused by a delet A;Reference number: I52618; MUID:92068764
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                     A; Molecule type: DNA
A; Residues: 1-14 < ON
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A; Accession: I52618
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A;Cross-references: GB:S68042; NID:g239717; PIDN:AAB20440.1; PID:g239718
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Pred. No. 1.7e
5; Mismatches
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Pred. No. 1.7e+03
3; Mismatches
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endosperm protein, 18K - rye (fragment)
c;Speciles: Secale cereale (rye)
C;Date: 19-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 17-Apr-1998
C;Accession: S70331
R;Rocher, A.; Calero, M.; Soriano, F.; Mendez, E.
                                                                                                           RESULT
S70331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A:Molecule type: DNA
A:Residues: 1-15 <JOYZ>
A:Residues: Dahlberg, J.E.
J. Mol. Biol. 131, 573-592, 1979
A:Title: A small, unstable RNA molecule of A:Reference number: A37586; MUID:80074983
A:Accession: A37586
A:Molecule type: DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         probable heme-binding protein - garden pea chloroplast (fragment) (;Species: chloroplast Pisum sativum (garden pea) C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 11-Jan-2000 C;Accession: S14560 R;Smith, A.G.; Wilson, R.J.; Kaethner, T.M.; Willey, D.L.; Gray, J.C. submitted to the EMBL Data Library, October 1990 A;Reference number: S14557 A;Accession: S14560
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Best Local Similarity
Thes 4; Conserv
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C;Superfamily: maize chloroplast protein cemA
C;Keywords: chloroplast; heme; transmembrane protein
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c;Species: Escherichia coli
c;Species: Escherichia coli
c;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 08 Oct-1999
C;Accession: A26228; A37586; Q00551
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A; Residues: 1-15 <SAH>
A; Cross-references: GB
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J. Bacteriol. 152, 1211-1219, 1982
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-18 <SMI>
                                                                                                                                                                                                                                                                                                                                                                                                                    Genetics:
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                12 LFLHLLDF 19
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                                                                                                                                                                                        LLLHVIGF 14
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                                                                                                                                                                                                                                                                                                                                                                         87 min
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                                                                                                                                                                                                                                                                                                                                                                                                                             GB:X01895; NID:g40868; PIDN:CAA25985.1; PID:g40869
                                                                                                                                                                                                                                                                                          24.0%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 25; DB 2;
Pred. No. 6.6e+02;
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RESULT S10452

hypothetical

protein (bphA 5'

region) - Aspergillus niger

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Query Match
Best Local Similarity
"herhes 3; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Thes 5; Conserv:
 B
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A;Title: Identification of major rye secalins as coeliac immunoreactive proteins
A;Reference number: S70327; MUID:96283789
A;Accession: S70331
                                                                                                                                                                    C; Keywords: T-cell receptor
                                                                                                                                                                                      A; Cross-references: EMBL: 235676;
                                                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-13 <LE6>
                                                                                                                                                                                                                                                                A;Cross-references: EMBL:Z35675; A;Accession: S47398
                                                                                                                                                                                                                                                                                                   A; Molecule type: mRNA
A; Residues: 1-13 <LE5>
                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: EMBL:Z35708; NID:g527509; PIDN:CAA84777.1; PID:g527510
A;Accession: S47396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: mRNA
A; Residues: 1-13 <LE3>
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A; Residues: 1-13 <LE2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: EMBL:235690; NID:g527471; PIDN:CAA84759.1; PID:g527472; EMBL:2356
A;Accession: S47375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Reference number: S47355
A;Accession: S47365
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R; Lehner, P.J.
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                                                                                                                                                                                                                                              A;Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                         A; Accession: S47397
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A;Residues: 1-13 <LE4>
                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Status: preliminary
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A; Residues: 1-13 <LEH>
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3 SSIRSSYEQ 11
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                                                                                         23.0%;
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41.7%;
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                                                                                     Score 23;
Pred. No.
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Pred. No. 8.
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8.7e+02;
6;
                                                                                         DB 2;
1e+03;
                                                                                                                                                                                    PIDN: CAA84745.1;
                                                                                                                                                                                                                                                                                PIDN:CAA84744.1;
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                                                                                                         Length 13;
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                                                                                                                                                                                                                                                                                                                                                                       PID: 9527528
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                                                                                                                                                                                    PID:9527532
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                       Title:
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                                                                                                                       Post-processing: Minimum Match
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seq length: 20
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PIR_65:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
                                                                                                                                                                                                 hits satisfying chosen parameters:
                                                                                       Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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100
1 TTVQASYSQKKLF
                                                                                                                                                                                                                                182106 seqs, 63460219 residues
                                                                                                                                                                                                                                                                                                                                                                                                December 21, 2000, 08:30:03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                       TTVQASYSQKKLFLHLLDFQ 20
            pir1:*
pir2:*
pir3:*
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11.273 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                  Search time 112.59 Seconds
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

A; Molecule type: protein
A; Residues: 1-14 <ROS>
A; Experimental source: strain Marburg
C; Keywords: methanogenesis; oxidoreductase

C;Accession: S13864
R;Rospert, S.; Linder, D.; Ellermann, J.; Thauer, R.K.
Eur. J. Biochem. 194, 871-877, 1990
A;Title: Two genetically distinct methyl-coenzyme M reductases in Methanobacterium th A;Reference number: S13864; MUID:91099370
A;Accession: S13864

methyl coenzyme M reductase (EC 1.8.-.-) II alpha chain - Methanobacterium thermoauto C;Speckes: Methanobacterium thermoautotrophicum A;Variety: strain Marburg C;Date: 19-Mar-1997 #sequence_revision 13-Sep-1998 #text_change 30-Oct-1998

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	o	_ن	4	ω	2	1	z	Result	
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T-cell receptor be	nuclear antigen EB	l prot	al p	al 2.1	blaZ protein - Sta	leu operon leader	polistes mastopara	T-cell receptor be	T-cell antigen rec	kallikrein K2 - hu	tei	ameletin - rat	chain		ınin chair	l surface g	a C	Ö	n alpha-2 -	ell recep	CTC 75 protein - h	hypothetical prote	T-cell antigen rec	endosperm protein,	spot 42 protein -	bin	aglandi	methyl coenzyme M	on		

ALIGNMENTS

prostaglandin D-synthase - rat (fragment)
N;Alternate names: prostaglandin-H2 D-isomerase
C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Dec-1996 #sequence_revision 13-Mar-1997 #text_change 31-Oct-1997
C;Accession: S65717
R;Giacomelli, S; Leone, M.G.; Grima, J.; Silvestrini, B.; Cheng, C.Y.
Biochim. Biophys. Acta 1310, 269-276, 1996
A;Title: Astrocytes synthesize and secrete prostaglandin D synthetase in vitro.
A;Reference number: S65716; MUID:96177373
A;Accession: S65717
A;Status: preliminary A; Molecule type: protein
A; Residues: 1-15 <GIA>
C; Superfamily: lipocalin; lipocalin homology RESULT S65717 밁 δÃ Query Match Best Local Similarity "hehes 6; Conserv: Дb Ş Query Match
Best Local Similarity
Matches 5; Conserv ω 3 EKKLFLKAL 11 9 QKKLFLHLL 17 2 TVQASYSQKK 11 TVQPNFQQDK 12 Conservative Conservative 28.0%; 26.0%; Score 26; DB 2; L6 50.0%; Pred. No. 3.7e+02; tive 2; Mismatches 3; 1; Mismatches Score 28; DB 2; Pred. No. 1.6e+02; Length 14; Length 15; Indels Indels 0; 0; Gaps Gaps 0, 0;

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RESULT 15
US-08-959-512-57
; Sequence 57, Application US/08959512
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-383-753-57
                                                                                                                             В
                                                                                                                                                                                                                                                                          ; TOPOLOGY: linear; MOLECULE TYPE: peptide US-08-586-772-57
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US-08-586-772-57
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                                                                                                                                                                Query Match
Best Local Similarity
...-ches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/586,772
FILING DATE: 03-FEB-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNBER: US 08/099,991
FILING DATE: 30-JUL-1993
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 1038.1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 55.8
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Schatz, Peter J.
TITLE OF INVENTION: Biotinylation of Proteins
NUMBER OF SEQUENCES: 102
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie and Crew
STREET: One Market Plaza, Steuart Tower
                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 415-326-240
TELEFAX: 415-326-2422
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                          10 AQKMLYQHL 18
                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: sir
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CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10 AQKMLYQHL 18
                                                                                                                                         8 SQKKLFLHL 16
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55.6%;
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Pred. No. 1.2e+02;
2; Mismatches 2;
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Pred. No. 1.2e+02
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Qy
                                                                                                                         Query Match
Best Local Similarity
""" 5; Conserv
                                                                                                                                                                                                                   ; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-959-512-57
                                                                              밁
Search completed: December 21, Job time: 369 sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: SCHATZ, Petel
TITLE OF INCURTION: Biol
NUMBER OF SEQUENCES: 10.
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                             TELEPHONE: 415-326-2400
TELEPAX: 415-326-2422
INFORMATION FOR SEQ ID NO: 5
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/383,753
FILING DATE: 03-FEB-1995
APPLICATION NUMBER: US 08/099,99
FILING DATE: 30-JUL-1993
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 1038.1
TELECHNONE: 415-326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. 5932433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: One Market P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE:
                                                                           10 AQKMLYQHL 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                         8 SQKKLFLHL 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94105
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                                                                                                                                                                                                                                              linear
                                                                                                                                        Conservative
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             2000, 08:31:46
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                                                                                                                                       Score 27; DB 2; L, Pred. No. 1.2e+02; 2; Mismatches 2;
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                                                                                                                                                                     Length 18;
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US-09-100-414B-2
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Patent NO. 6025468
GENERAL INFORMATION:
APPLICANT: Wang, Chang Yi
TITLE OF INVENTION: NOVEL LHRH PEPTIDE
TITLE OF INVENTION: IMMUNOGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 5; Conserv
                                                                                                                                                        Sequence 61, Application US/09100409A Patent No. 6090388
                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
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ZIP: 10154-0054
ZIP: 10154-0054
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: IBM PC compatible
TOMBUTER: IBM PC Windows
                                                                                                                                                                                                                                                                                                                      Matches
                                                                          GENERAL INFORMATION:
APPLICANT: Wang, Chang Yi
APPLICANT: Wang, Chang Yi
TITLE OF INVENTION: PREVENTION AND TREATMENT
TITLE OF INVENTION: IMMUNE DISORDERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: 212-758-4800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Maria H. Lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM: PC W
SOFTWARE: WORD 97
CURRENT APPLICATION DATA:
                                          NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
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ADDRESSEE: Morgan & Finnegan, L.L.P.
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                                                                                                                                                                                                                                                                                    10 KKLFLHLLD 18
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                                                                                                                                                                                                                                                                                                                   Local Similarity
les 6; Conser
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REFERENCE/DOCKET NUMBER: 11
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              ADDRESSEE: MORGAN & FINNEGAN STREET: 345 Park Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09 FILING DATE: 20-JUNE-1998
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New York
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66.7%;
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                                                                             PREVENTION AND TREATMENT OF HIV INFECTION AND IMMUNE DISORDERS
                                                              64
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1; Mismatches
                                                                                                                                                                                                                                                                                                                                  Score 27;
Pred. No.
                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                  DB 3;
1e+02;
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Patent No. 5723584
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Matches 6; Conserv
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-758-4800
TELEPAX: 212-751-6849
INFORMATION FOR SEQ ID NO: 61:
               INFORMATION FOR SEQ ID NO:
                                                                                                                            APPLICATION NUMBER: US/08/
FILING DATE: 03-FEB-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 30-JUL-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                            ZIP: 94105
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie and Crew STREET: One Market Plaza, Steuart Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 16 amino acids
TYPE: amino acid
                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
TELEFAX: 415-326-2422
                                                                                                                                                                                                                                                    OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
SEQUENCE CHARACTERISTICS:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
SOFTWARE: #1.25
                                                                  REFERENCE/DOCKET NUMBER: 10:
                                                                                                  NAME: Smith, William M. REGISTRATION NUMBER: 3(
                                                                                                                                                                                                                                                                                                                                                                                        CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10 KKLFLHLLD 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/08383753
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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1e+02;
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RESULT 8
5266328-11
; Patent No. 5266328
; APPLICANT: SKUBITZ, AMY P.N.; FURCHT, LEO T.
; ATTLE OF INVENTION: LAMININ CHAIN POLYPEPTIDES FROM
                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                       US-07-654-839-5
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Best Local Similarity
"hehes 5; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         THE CARBOXY TERMINAL GLOBULAR DOMAIN
NUMBER OF SEQUENCES: 14
CURRENT APPLICATION NOMBER: US/07/573,
APPLICATION NUMBER: US/07/573,
FILING DATE: 27-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-854-029-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO:11:
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Best Local Similarity 41.,
""" best S; Conservative
                                                                                                                                                                                                                                                    Sequence 5, Application US/07654839
Patent No. 5372933
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 617-832-7000
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                   APPLICANT: Zamarron, Concepcion
APPLICANT: Plow, Edward F
APPLICANT: Ginsberg, Mark H
TITLE OF INVENTION: MONOCLONAL ANTIBODIES AGAINST
TITLE OF INVENTION: RECEPTOR-INDUCED BINDING SITES
NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 617-832-1242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
TYPE: linear
                                                                                                                                       CORRESPONDENCE ADDRESS:
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COUNTRY: USA
ZIP: 92037
                                                             ADDRESSEE: The Scripps Research Institute, Office of ADDRESSEE: Patent Counsel STREET: 10666 No. 5372933th Torrey Pines Road., Suite 220, STREET: Mail Drop TPC8
                                                      CITY: La
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: MIV-019.08
                                    STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/
FILING DATE: 2 MAY 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 17
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                                    CA
                                                    Jolla
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RESULT 10
PCT-US94-01234-47
Sequence 47, Application PC/TUS9401234
GENERAL INFORMATION:
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Best Local Similarity
"hes 5; Conserve
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APPLICATION NUMBER: US 07/252,753
FILING DATE: 03-OCT-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/415,029
FILING DATE: 29-SEP-1989
ATTORNEY/AGENT INFORMATION:
                                                                                         FILING DATE: 02-FEB-1993
INFORMATION FOR SEQ ID NO: 47:
SEQUENCE CHARACTERISTICS:
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TELEFAX: 619-554-6312
INFORMATION FOR SEQ ID NO:
                                                                                                                                             APPLICATION NUMBER: PCT/US94/01234
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/084,542
FILING DATE: 28-JUN-1993
PRIOR APPLICATION NUMBER: US 08/012,566
APPLICATION NUMBER: US 08/012,566
                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Bingham, Douglas A REGISTRATION NUMBER: 32,457 REFERENCE/DOCKET NUMBER: 5C TELECOMMUNICATION INFORMATION: 619-554-2937
MOLECULE TYPE:
FRAGMENT TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: METHODS FOR PRODUCING POLYPEPTIDE TITLE OF INVENTION: BINDING SITES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
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                                                      TYPE:
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                                      TOPOLOGY:
                                                                        LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 YSMKKTTMKIIPF 13
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                                                      amino acid
                                                                           13 amino acids
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Pred. No. 83;
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Query Match

27.0%;

Score 27;

DB 4;

Length 13;

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US-08-454-207A-43
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Best Local Similarity burners
6; Conservative
                                                                                                                                    ; MOLECULE TYPE: peptide US-08-428-415-28
                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/428,415
FILING DATE: 24 April 1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REGISTRATION NUMBER: MII-019CP3
REFERENCE/DOCKET NUMBER: MII-019CP3
TELECOMMUNICATION INFORMATION:
TELLEPHONE: 617-227-7400
TELLEFAX: 617-227-5941
INFORMATION FOR SEQ ID NO: 28:
В
                          Qy
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GENERAL INFORMATION:
APPLICANT: Cold SI
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INFORMATION FOR SEQ ID NO:
                                                                            Query Match
Best Local (
                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 18-DEC-1992
ATTORNEY/AGENT INFORMATION:
NAME: Dianne B. Elderkin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Cold Spring Harbor Laboratory
TITLE OF INVENTION: No. 5756335el Human cdc25 Genes, Encoded
TITLE OF INVENTION: Products and Uses Thereof
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
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LENGTH: 14 amino acids
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REFERENCE/DOCKET NUMBER: CC
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                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: ASCII(text)
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CITY: Boston
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                                                             Local Similarity
nes 5; Conserv
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                             7 YSQKKLF 13
 YSQEELF 14
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GY: linear
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                                                               Conservative
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85.7%;
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Pred. No. 1.2e+05;
"" "" matches 0;
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Pred. No.
                                                               red. No. 58;
Mismatches
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US-08-379-685-28
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; TOPOLOGY: linear
; MOLECULE TYPE: pept
US-08-379-685-28
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3-08-379-685-28
3-08-379-685-28
Sequence 28, Application US/08379685
Sequence 28, Application US/08379685

Sequence 28, Application US/08379685

Sequence 28, Application US/08379685

Patent No. 5770423

SCOLD Spring Harbor Laboratory

COLD Spring Harbor Laboratory

COLD Spring Harbor Laboratory

Applicant: Cold Spring Harbor Laboratory

Application US/08379685

Application US/08379685

Sequence 28, Application US/083796

Sequence 28, Application US/083796

Sequence 28, Applica
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Best Local Similarity
Whiches 5; Conserve
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COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII(text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/379,685
APPLICATION NUMBER: US/08/379,685
FILING DATE: 26 January 1995
CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
NAME: Vincent, Matthew P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 28, Application US/08854029 Patent No. 5994074
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Cold Spring Harbor Laboratory
TITLE OF INVENTION: No. 5994074el Human cdc25 Genes, Encoded
TITLE OF INVENTION: Products and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: MITTELECOMMUNICATION INFORMATION:
TELEPHONE: 617-227-7400
TELEPAX: 617-227-5941
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LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY, HOAG & ELIOT LLP
                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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STATE: Massachusetts
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                                                                                                                                                                                                                                                                                                                            One Post Office Square
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ASCII(text)
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Pred. No. 58;
2; Mismatches
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US-08-454-207A-36
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Best Local Similarity
Thes 6; Conserve
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; HYPOTHETICAL:
US-08-871-355A-355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-871-355A-355
; Sequence 355, Application US/08871355A
; Patent No. 6015669
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                                                                                                                                                                 Sequence 36, Application US/08454207A Patent No. 5710123
                                                                                                                                               GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: RPMS
TELECOMMUNICATION INFORMATION:
TELECHIONE: (404) 873-8794
TELECHIONE: (404) 873-8796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (404) 873-8795
INFORMATION FOR SEQ ID NO:
APPLICANT: Heavner, George A.
APPLICANT: Kruszynski, Marian
TITLE OF INVENTION: PEPFIDE INHIBITORS OF SELECTIN BINDING
NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5710123ris LLP
STREET: One Liberty Place - 46th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 30309-3450

ZIP: 30309-3450

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: David William Holden
TITLE OF INVENTION: Identification of Genes
NUMBER OF SEQUENCES: 501
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/871,355A
FILING DATE: 09-JUN-1997
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/A
FILING DATE: 11-DEC-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                11 KLFLHLL 17
||| |||
6 KLFFHLL 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Patrea L. Pabst
STREET: 2800 One Atlantic Center
STREET: 1201 West Peachtree Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
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85.7%;
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Pred. No.
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17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 6; Conserv
APPLICATION NUMBER: US/08/454,207A ETILING DATE: 09-UN-1995 CLASSIFICATION: 514 PRIOR APPLICATION DATA: APPLICATION NUMBER: PCT/US93/12110 FILING DATE: 13-DEC-1993 PRIOR APPLICATION DATA: APPLICATION DATA: APPLICATION NUMBER: 07/997,771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                 COUNTRY: U.S.A.
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch
                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Heavner, George A. APPLICANT: Kruszynski, Marian TITLE OF INVENTION: PEPTIDE II NUMBER OF SEQUENCES: 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/12110
FILING DATE: 13-DEC-1993
PRIOR APPLICATION DATA:
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                                                                                                                                                     CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: WordPerfect 6.1 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 18-DEC-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WORDERfect 6.1
                                                                                                                                                                                                                                                                                                                STREET: One Liberty CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 215 July 215 TELEPHONE: 215-568-3439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Dianne B. Elderkin REGISTRATION NUMBER: 28, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 09-JUN CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                     STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 07/9 FILING DATE: 18-DEC-1992
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STATE: PA
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GY: linear
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SYSTEM: PC-DOS/MS-DOS
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Title:
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Issued_Patents_AA:*
1: /cgn2_6/ptodata/2/
2: /cgn2_6/ptodata/2/
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US-08-871-355A-355

US-08-454-207A-35

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US-08-499-685-28

US-08-399-685-28
 5266328-11

US-07-654-839-5

PCT-US94-01234-47

US-09-100-4148-2

US-09-100-409A-61

US-08-383-753-57

US-08-959-512-57

US-08-959-512-57

US-08-959-512-59

US-08-267-092A-49

US-08-267-092A-9

US-08-268-268-208

US-08-482-228-208

US-08-482-228-208

US-08-482-228-209

US-08-482-528-209

US-08-482-528-209

US-08-482-528-209

US-08-482-528-209

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US-08-481-531-53

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47, Appl
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209, App
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4, Appl
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AT. TGNMENTS	US-08-726-46-48-33 US-09-192-048-16 US-09-100-4148-26 US-09-100-4148-30 US-09-100-4148-30 US-09-100-4148-30 US-09-100-4148-30 US-08-945-168-21 US-08-945-168-21 US-08-945-168-21 US-08-310-912A-117 US-08-310-912A-117 US-08-310-912A-117 US-08-310-912A-117 US-08-310-912A-117 US-08-310-912A-117 US-08-310-437-1 US-09-173-891-44 US-09-173-891-44 US-08-518-474-9 US-08-518-474-11 US-08-518-474-11 US-08-518-474-11 US-08-518-474-11	
	Sequence 16, Appl Sequence 26, Appl Sequence 30, Appl Sequence 16, Appl Sequence 179, Appl Sequence 179, Appl Sequence 117, Appl Sequence 117, Appl Sequence 44, Appl Sequence 44, Appl Sequence 44, Appl Sequence 44, Appl Sequence 44, Appl Sequence 44, Appl Sequence 47, Appl Sequence 11, Appl Sequence 11, Appl	

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RESULT 1
US-08-637-759B-355
; Sequence 355, Application US/08637759B
; Patent No. 5876931
; GENERAL INFORMATION:
; MOLECULE TYPE:
; HYPOTHETICAL:
US-08-637-759B-355
                                                                                                                                                                     EILING DATE: 11-DEC-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea I., 284
REGISTRATION NUMBER: 31, 284
REFERENCE/DOCKET NUMBER: RPMS
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1180RMATION:
TELECOMMUNICATION 1373-8794
                                                                                                                                     TELEFAX: (404) 873-87
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: PC-D
SOFTWARE: PatentIn Rel
CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FILING DATE: 11-DEC-1
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STREET: 1201 W.
CITY: Atlanta
STATE: Georgia
                                                                                                                     SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER:
                                                   STRANDEDNESS:
TOPOLOGY: lin
                                                                                                     LENGTH:
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                                                                                       4: 14 amino acids amino acid
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2800 One Atlantic Center
1201 West Peachtree Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                David William Holden
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                       (404) 873-8795
                                                                                                                                                                                                                                                                                                                                                                                                                             E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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linear
                 : protein
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RA Adams D., Celniker S.E., Li P.W., Hoskins R.A., Galle R.F.,
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RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Noshrefi A.,
RA Meunt S.M., Moylan, Murphy L., Murphy L., Murny D.M., Nelson D.L.,
RA Wellsen S.M., Woylan, K., Stapleton M., Skupski M.P., Smith T.,
Ra Shue B.C., Siden Kiamos I., Sinpson M., Skupski M.P., Smith T.,
Ra Shue B.C., Siden Kiamos I., Sinpson M., Skupski M.P., Smith T.,
Ra Shue S.M., Woodage T., World Y., Chang S., Yao Q.A.,
Whishelm R.A., Nord M., Nord M.
                                                                                                                                                                                                                                                                                                                                           FLYBASE; FBgn0040023;
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Pred. No. 2.2e+03;
1; Mismatches 0; Indels
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SEQUENCE.
MEDLINE; 9
Nakai K.,
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        plasmid
                                                               Tilly K., Casjens S.,
                                                                                                     SEQUENCE FROM N.A STRAIN-IP90;
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Bacteria; Spirochaetales;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 97426044.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The Borrelia burgdorferi circular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
mes 7; Conserv
                                                                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                                                                                                 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 LLQMDFG 8
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    Borrelia burgdorferi circular plasmid mid structure and targeted inactivation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
4; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1449 MW;
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57.1%;
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80°,
80°,
                                                                                                                                                          Spirochaetaceae;
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Pred. No.
2; Mismatc
                                                                                                                                                                                                                                    Created)
Last sequence update)
Last annotation update)
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Last annotation update)
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Pred. No. 2.1e+03;
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                                                         Bono J.L.,
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1.5e+03;
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                                                         Samuels D.S., Högan
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RESULT
Q9W508
ID Q99
AC Q9
AC Q9
DT 01
DT 01
DT 01
DT 02
CG
GN CG

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Best Local Similarity
Matches 4; Conserv
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Best Local Similarity
Matches 4; Conser
                                                                                                         Q9W5Q8 PRELIMINARY;
Q9W5Q8;
Q1-MAY-2000 (TrEMBLrel. 13, 0
Q1-MAY-2000 (TrEMBLrel. 13, 1
Q1-MAY-2000 (TrEMBLrel. 13, 1
Q1-MAY-2000 (TrEMBLrel. 13, 1
CG12575 PROTEIN (FRAGMENT).
CG12575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O34622
O34622;
O1-JAN-1998
O1-JAN-1998
O1-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; U93
NON_TER
SEQUENCE
Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Musc
Ephydroidea; Drosophilidae; Drosophila.
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Expression and sequence of outer surface protein American isolates of Borrelia burgdorferi."; FEMS Microbiol Lett. 124:367-372(1994).

EMBL; U93694; AAC45522.1; -.
EMBL; U04280; AAC45543.1; -.
EMBL; U04282; AAC45541.1; -.
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STRAIN=CT39 (ILL-1),
MEDLINE; 97426044.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Borrelia burgdorferi (Lyme
Bacteria; Spirochaetales; S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-DN127CL9-2, MEDLINE; 95154673.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GUAA.
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EMBL; U93701; A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stevenson
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                                                                                                                                                                                                                                                                                      15
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                                                                                                                                                                                                                                                                                                                                                                                               2 LLQMDFG 8
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                                                                                                                                                                                                                                                                                                                                                      ILVLDFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B., Barthold S.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Diol. 25:361-374(1997).
01; AAC45536.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 AA; 1407 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TrEMBLrel.) (TrEMBLrel.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21.6%; 57.1%;
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Spirochaetaceae; Borrelia
                                                                                                                                               Last sequence up
                                                                                                                                                                                               Created)
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Last annotation update)
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Pred.
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Pred. No. 1.5e+03;
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                                                                                                                                                                                                                                           PRT;
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RESULT
Q9TWH5
ID Q1
AC Q1
DT 0:
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Q9PS70
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Matches 4
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Best Local Similarity
Matches 6; Conserv
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OPPS70;
OPPS70;
OPPS70;
O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2000 (TREMBLrel. 13, Last annotation update)
LOW DENSITY LIPOPROTEIN RECEPTOR-RELATED PROTEIN.
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Eukaryota; Metazoa; Neognathae; Galliformes; Phasiani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
CALMODULIN KINASE 2 (FRACMENT).
Schizosaccharomyces pombe (Fission yeast).
Eukaryota; Fungi; Ascomycota; Schizosaccharomycetales;
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                094554;
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                                                                                                                                                                                                           MEDLINE; 92011685.
Stifani S., Barber D.L., Aebersold R.,
Schneider W.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alemany V., Aligue R
Submitted (MAY-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Schizosaccharomycetaceae;
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Q9TWH5 PRELIMINARY Q9TWH5; 01-MAY-2000 (TrEMBLrel.
                                                                                                                                                                  "The laying hen expresses two different low de receptor-related proteins.";
J. Biol. Chem. 266:19079-19087(1991).
SEQUENCE 19 AA; 1861 MW; 4EEC931205620608
                                                                                                                                                                                                                                          SEQUENCE.
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                                                                        LLAQGLGXPTALALD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                 Conservative
                     PRELIMINARY;
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                                                                                                                           22.5%;
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  13,
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RESULT
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OCCORDINATION NO.
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Best Local
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Q9TTG3;
Q9TTG3;
Q1-MAY-2000 (
Q1-MAY-2000 (
Q1-JUN-2000 (
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Cell Tissue Res. 281:179-186(1995).
SEQUENCE 20 AA; 2304 MW; A298D3EB3F895R
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01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
40 KDA GAP JUNCTION PROTEIN (FRAMENT).
Heliothis virescens (Noctuid moth) (Owlet moth).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;
Noctuoidea; Noctuidae; Heliothinae; Heliothis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NON_TER
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Gene mapping in Ateles paniscus chamek."; Submitted (OCT-1998) to the EMBL/GenBank/DDBJ EMBL; AF099175; AAF21049.1; ...
INTERPRO; IPRO01286; ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
GLACTOCEREBROSIDASE (FRAGMENT).
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Ryerse J.S.;
                                    09PS42;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-MAY-2000 (TREMBLrel. 13, Last sequence update)
01-MAY-2000 (TREMBLrel. 13, Created)
01-MAY-2000 (TREMBLrel. 13, Created)
01-MAY-2000 (TREMBLrel. 13, Last sequence update)
01-MAY-2000 (TREMBL
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                                                                                                                                                                                           Q9PS42
                      Archosauria; Aves;
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                      Neognathae;
                                          Chordata; Craniata; Vertebrata; Euteleostomi;
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38.5%;
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Pred. No.
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Pred. No. 1.6e+03;
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                                                                                                                                                                                               PRT;
                      Galliformes;
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                        Phasianidae;
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Atelinae; Ate
                        Phasianinae;
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RESULT
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Matches 4
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Best Local S
Matches 5
           MEDLINE: 92250478.
MEDLINE: 92250478.
MEDLINE: 92250478.
Tokumitsu H., Mizutani A., Minami H., Kobayashi R., Hi
"A calcyclin-associated protein is a newly identified
"A calcyclin-associated proteins, annexin family.";
Ca2+/phospholipid-binding proteins, annexin family.";
J. Biol. Chem. 267:8919-8924(1992).
                                                                                                                                                                                                                                              01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
CALCYCLIN-ASSOCIATED PROTEIN, CAP50-CA2+/PHOSPHOLIPID-BINDING
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SEQUENCE
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01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-96117.4 (NOVEL PROTEIN SIMILAR TO GS2) (FRAGMENT).
                                                                                                                                             SEQUENCE.
                                                                                                                                                                                 Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata;
Mammalia; Eutheria; Lagomorpha; Leporid
                                                                                                                                                                                                                                                                                                                                                                                     Q9TRR6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (DEC-1999) to the EMBL; AL035398; CAB63074.1; NON_TER 1 1 1 SEQUENCE 12 AA; 1430 MW;
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Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Eukaryota; Futheria; Primates;
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Urbach E., Chisholm S.W.;

"Genetic diversity in Prochlorococcus sorted from the Sargasso Sea and Gulf Limnol. Oceanog. 43:1615-1630(1998).

EMBL; AF070133; AAD20742.1; -.

NON_TER 21 21
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Bacteria; Cyanobacteria;
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                                                                                                                                                                                    Leporidae;
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Eukaryota; Metazoa; Cho
Archosauria; Aves; Neogi
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Microbiology 143:1681-1690(1997).
EMBL; U62901; AAB62742.1;
                       "Multiplex display polymerase chain related sequences sharing a single m Anal. Biochem. 256:158-158(1998).
EMBL: U34617: AAC36455.1;
                                                         MEDLINE; 98141813.
Peale F.V., Mason K.,
                                                                        SEQUENCE FROM N.A.
STRAIN-WHITE LEGHORN; TISSUE-WHOLE
                                                                                                  Gallus.
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Query Match Best Local S Matches 4

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Score 25; DB Pred. No. 7.7e

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Post-processing: Minimum Match 0%
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1: sp_archea:*
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Gapop 10.0 , Gapext 0.5
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                                                 sp_organelle:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No. 1 2 3	Score 30.5 28 27 27	Query Match 27.5 25.2 24.3	Query Match Length DB 27.5 21 2 25.2 21 2 24.3 12 4 24.3 19 6	B 40	ID Q9ZG55 Q9X3D0 Q9UGS1 Q9TRR6	Description Q9zg55 chla Q9x340 proc Q9ugs1 hono Q9ugs1 horo
w	27	24.3	12	4	Q9UGS1	Q9ugs
4	27	24.3	19	σ	Q9TRR6	Q9trr6
5	26	23.4	21	Ν	P70861	P70861
σ	25	22.5	10	13	073594	O73594 gallus gal
7	25		16	ω	094554	094554
8	25	22.5	19	13	Q9PS70	Q9ps70 gallus gal
9	25		20	ഗ	Q9TWH5	Q9twh5
10	25	22.5	20	σ	Q9TTG3	Q9ttg3 ateles belz
11	24.5		22	13	Q9PS42	Q9ps42 gallus gal
12	24	21.6	13	2	031364	031364
13	24	21.6	13	N	031365	031365
14	24	21.6	13	N	034622	034622
15	24	21.6	19	G	Q9W5Q8	Q9w5q8
16	23.5	21.2	15	N	Q9R4U7	Q9r4u7
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	18.9	18.9	18.9	18.9	18.9	19.4	19.8		19.8	19.8	19.8	19.8	20.3	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
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,		Q9uyk7 pyrococcus	Q9zyw0 betylobraco	Q9z1i4 mus musculu	Q51765 pseudomonas	Q52009 pseudomonas	002830 oryctolagus	Q85096 punta toro	Q9tral bos taurus	Q9quj4 mus sp. mep	Q56945 yersinia ps	Q9upe7 homo sapien	Q9trll bos taurus	Q9s8el capsicum an	P71537 methanosarc	Q80817 human t-cel	Q41496 solanum tub	Q9zyb7 spinaria sp	Q9r4f1 desulfovibr	P82068 litoria gen	Q9x3i3 prochloroco	Q9trq7 bos taurus	035758 rattus norv	034770 borrelia af		Q9x533 escherichia

ALIGNMENTS

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RESULT 13
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Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea;
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PFAM; PF00081; sodfe; 1.
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
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39, Last sequence 39, Last annotes 39, Last 
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two-dimensional gel electrophoresis database
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MITOCHONDRIAL (EC 1.15.1.1) (FRAGMENT).
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                                                                                                            Amphibian
SEQUENCE
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"Novel uperin peptides from the dorsal glands of the australian floodplain toadlet Uperoleia inundata.";
Aust. J. Chem. 49:475-484(1996).
1- FUNCTION: SHOWS A MEDIUM ANTIBACTERIAL ACTIVITY AGAINST
L. MESENTERIODES, M.LUTEUS AND S.UBERIS.
1- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
1- MASS SPECIFORMETRY: MW-1926; METHOD-FAB.
                                                                                                                                                         "Novel uperin peptides from the dorsal glands floodplain toadlet Uperoleia inundata."; Aust. J. Chem. 49:475-484(1996)
-i- FUNCTION: SHOWS A MEDIUM ANTIBACTERIAL ACT. L.MESENTERIODES AND S.UBERIS.
                                                                                                                                                                                                                                Bradford A.M., Raftery M.J., Bowle J.H., Tyler M.J., Wallace J.C.
                                                                                                                                                                                                                                                                                            Uperoleia inundata (Floodplain toadlet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
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TISSUE=SKIN SECRETION;
                                                                                                                      -i- TISSUE SPECIFICITY: SECRETED BY THE SKIN
-i- MASS SPECTROMETRY: MW=1940; METHOD=FAB.
Amphibian skin; Antibiotic.
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                                                                   SEQUENCE
                                                                                     Hydrolase;
                                                                                                                                                                 MENDEL; 13
INTERPRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00152; ATPASE_ALPHA_BETA; PARTIAL ATP synthesis; Chloroplast; Thylakoid membrane;
                                                                                                                                                                                                                                                                                                                                                  Plastid enzymes.";
Planta 201:261-272(1997).
-i- FUNCTION: PRODUCES ATP FROM ADP IN
GRADIENT ACROSS THE MEMBRANE. THE B
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MOD_RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE.
MEDLINE; 93230895.
Loehr J., Klein J.
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"Cytokinin affects nuclear-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FISSUE-PROTONEMA;
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FUNCTION: CAUSES THE MIGRATION OF THE DISTAL RETINAL PIGMENT INTO THE PROXIMAL END OF THE PIGMENT CHROMATOPHORE CELLS AND THUS DECREASES THE AMOUNT OF LIGHT ENTERING THE RETINULAS.

SIMILARITY: TO THE PDH OF OTHER ARTHROPODS.
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                                                                                                                                                                                                                   SUBUNIT: F-TYPE ATPASES HAVE 2 COMPONENTS, CF(1) - THE CATALYTIC SUBUNIT: F-TYPE ATPASES HAVE 2 COMPONENTS, CF(1) - THE CATALYTIC CORE - AND CF(0) - THE MEMBRANE PROTON CHANNEL. CF(1) HAS FIVE SUBUNITS: ALPHA(3), BETA(3), GAMMA(1), DELTA(1), EPSILON(1), CF(0) HAS THREE MAIN SUBUNITS: A, B AND C. DELTA(1), EPSILON(1), CF(0) HAS THREE MAIN SUBUNITS: A, B AND C. SUBCELLULAR LOCATION: CHLOROPLAST THYLAKOID MEMBRANE.
                                                                                                                                                                                                      SIMILARITY: BELONGS TO THE ATPASE ALPHA/BETA CHAINS FAMILY
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(Rel. 34, Last sequence update)
(Rel. 35, Last annotation update)
E BETA CHAIN (EC 3.6.1.34) (FRAGMENT).
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    Score
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THE CATALYTIC
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Best Local :
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Matches 3; Conserv
                                                                                                                                                                                                                                                                                               _BACSU STANDARD; PRT;
GSI5_BACSU STANDARD; PRT;
P80861;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence up
30-MAY-2000 (Rel. 39, Last annotation
GLCCOSE STARVATION-INDUCIBLE PROTEIN:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TRYP_PROAT
P35051;
01-FEB-1994 (
01-FEB-1994 (
01-NOV-1995 (
Hecker M.;
"First steps from a two-dimensional pregulation map for Bacillus subtilis. Electrophoresis 18:1451-1463(1997).
-!- INDUCTION: BY GLUCOSE STARVATION.
-!- SIMILARITY: HIGH, TO GLUTAMYL-TKH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NON_TER
SEQUENCE
                                                                                                                             MEDLINE; 97443988
Antelmann H., Ber
                                                                                                                                                                      SEQUENCE.
STRAIN=IS58;
                                                                                                                                                                                                                                                    Bacillus subtilis.
Bacteria; Firmicutes; Bacillus/Clostridium group;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TRYPSIN FAMILY.
PIR; A27719; A27719.
HSSP; P07288; 1PFA.
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01-FEB-1994 (Rel. 28, Last sequence update)
01-FCB-1995 (Rel. 28, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
TRYPSIN PRECURSOR (EC 3.4.21.4) (FRAGMENT).
Protopterus aethiopicus (Marbled lungfish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Dipnoi; Lepidosireniformes; Protopteridae; Protopterus.
                                                                                                                                                                                                                                       Bacillus/Staphylococcus
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PROSITE; PS00134; TRYPSIN_HIS; PARTIAL.
PROSITE; PS00135; TRYPSIN_SER; PARTIAL.
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PROPEP
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-!- SIMILARITY: BELONGS TO PEPTIDASE FAMILY S1; ALSO KNOWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       lungfish trypsinogens.";
FEBS Lett. 14:222-224(1971).
-i- CATALYTIC ACTIVITY: PREFERENTIAL CLEAVAGE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hermodson M.A., Tye R.W., Reeck G.R., "Comparison of the amino terminal seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=PANCREAS;
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1 7 ACTIVATION
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  GLUTAMY L-TIKNA
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2.8e+
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NON_TER 20
SEQUENCE 20 AA
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P56923;
30-MAY-2000
30-MAY-2000
30-MAY-2000
TEMPORIN L.
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01-NOV-1997 (Rel. 35, Last annotation update)
SERUM AMYLOID P-COMPONENT (SAP) (FRAGMENT).
Mustelus canis (Smooth dogfish).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P19095;
01-NOV-1990 (Rel. 16,
01-NOV-1990 (Rel. 16,
01-NOV-1997 (Rel. 35,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes; Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes; Triakidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MUSCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J. Biol. Chem.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Robey F.A., Tanaka T., Liu T.-Y.; "Isolation and characterization of two major serum proteins from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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PIR; B20569; B20569.
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                      TISSUE=SKIN;
MEDLINE; 97175050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN
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  Simmaco M., Mignogna
                                                              SEQUENCE
                                                                                                                    Rana temporaria (European common
Eukaryota; Metazoa; Chordata; Cra
                                                                                                    Amphibia;
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SUBUNIT: HOMOPENTAMER. PENTAXIN (OR PENTRAXIN) HAVE A DISCOID ARRANGEMENT OF 5 NONCOVALENTLY BOUND SUBUNITS.
DISEASE: SAP IS A PRECURSOR OF AMYLOID COMPONENT P WHICH IS FULL IN BASEMENT MEMBRANE AND ASSOCIATED WITH AMYLOID DEPOSITS.
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                                                                                                      Batrachia;
                                                                                                                  Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                               (Rel. 39, Created)
(Rel. 39, Last sequence up)
(Rel. 39, Last annotation)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mitochondrion
                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 965 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2303
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57
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50.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MW;
    Canofeni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D05B5735B3386769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
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Pred. No.
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Pred.
                                                                                                      Neobatrachia; V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OA33BD34006E5AA6 CRC64;
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                                                                                                                                             frog).
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      s;
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                                                                                                                                                                                   update)
        Miele
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                                                                                                      Vertebrata;
a; Ranoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .3e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amyloid
        Mangoni
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                      Euteleostomi;
Ranidae; Rana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
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RESULT (
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                                                                                                                                           RESULT 9
DRPH_UCAPU
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RPP
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Best Local :
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                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JUL-1998 (Rel. 36, C
15-JUL-1998 (Rel. 36, I
30-MAY-2000 (Rel. 39, I
MALATE DEHYDROGENASE (F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amphibian
MOD_RES
                                                                                                                                                                                                                                                                              NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               temporaria."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Barra D.;
"Temporins,
                                                                   01-NOV-1988 (Rel. 09, Created)
01-NOV-1988 (Rel. 09, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
DIGMENT-DISPERSING HORMONE (PDH) (LIGHT ADAPTING
PIGMENT HORMONE) (DRPH).
                                                                                                                                                                                                                                                                                         PROSITE; PS00068; MDH; PARTIAL. Oxidoreductase; Tricarboxylic acid NON_TER 16 16
                                                                                                                                                                                                                                                                                                                                                             Naterstad K., Submitted (SEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HUM
                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                        Bacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                Synechocystis
                                                                                                                                                                                                                                                                                                                                                                                                                            MDH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P80460;
                            Uca pugilator (Atlantic sand fiddler crab) (Celuca pugilator). Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca; Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura; Eubrachyura; Ocypodoidea; Ocypodidae; Celuca.
                                                                                                                        DRPH_UCAPU P08871;
        SEQUENCE.
                                                                                                                                                                                                                                                                                                                      NTERPRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13 LLVDFLQSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <del>د ر</del>
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                                                                                                                                                                                                        3 LQMDFG
                                                                                                                                                                                                                                                                                                                              erstad K., Synstad B., Sirevag R.;
mitted (SEP-1996) to the SWISS-PROT data bank.
CATALYTIC ACTIVITY: L-MALATE + NAD(+) = OXALOACETATE +
SUBUNIT: HOMODIMER (BY SIMILARITY).
SIMILARITY: BELONGS TO THE LDH FAMILY. MDH SUBFAMILY.
                                                                                                                                                                                                                                                                                                                      SIMILARITY: BELONGS ERPRO; IPRO01252; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         skin; Antibiotic;
                                                                                                                                                                                                                                                                                                                                                                                                      stis sp. (strain PCC 6714).
Cyanobacteria; Chroococcal
                                                                                                                                                                                                                                                                               16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11 AA;
Riehm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antimicrobial
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                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                              AA; 1780 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                    STANDARD;
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S ANTIBACTERIAL ACTIVITY
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P.,
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66.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     st annotation 1.1.1.37) (FI
                                                                                                                                                                                                                                                                                                                                                                                                        Chroococcales; Synechocystis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SECRETED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptides
                           opoda; Crustacea; Malac
Decapoda; Pleocyemata;
Ocypodidae; Celuca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 20; DB
Pred. No. 1.4e
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amidation; Multigene
                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                       Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1E990549B3372724 CRC64;
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                                                                                                                                                                                                                                                                                 61D1896F14E81984 CRC64;
                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
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 .
A.,
                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                      ion update) (FRAGMENT)
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                                                                                                                                                                                                                                                                                                    cycle;
 Kleinholz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
                                                                                                                                    18
                                                                                                                                                                                                                                        DB 1;
2.1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.4e+03;
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                                                                                                                                    A
 L.H.,
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  G.E.,
                                                                                                                                                                                                                                                                                                                                                        NADH.
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Best Local S
Matches 5
                                   Query Match

Best Local Similarity

Matches 3; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                          01-FEB-1991 (Rel. 17, Last sequence up 01-DEC-1992 (Rel. 24, Last annotation CARBON MONOXIDE DEHYDROCENASE MEDIUM C) Becteria; Proteobactaria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oxidoreductase; Molybdenum NON_TER 14 14
                                                                                                                                                                                                                                                                                                  carboxydotrophic bacteria.";
Arch. Microbiol. 152:335-341(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                           Kraut M.,
                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                              lydrogenophaga.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vasoconstrictor; Plasma;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -1- TISSUE SPECIFICITY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammalia;
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                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 90055678
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H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10 PKHLLV 15
                                                                                                                                                                                                                                                                                 CATALYTIC ACTIVITY:
                                                                                                                                                                                                                          SUBUNIT: CONSISTS
                                                                                                                                                                                                                                           COFACTOR:
LLLQMDFGFPKHL
                                                                                                                                                                                      PL0142; PL0142
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5; Conser
                                                                                                                                                                                                                                                                                                                                                          Hugendieck I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                Proteobacteria; beta subdivision; Comamonadaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Metazoa;
Eutheria;
                                                                                                                               14
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                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                  MOLYBDENUM.
CONSISTS OF THREE POLYPEPTIDE CHAINS: LARGE,
                                                                                                                               AA; 1756 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IFICITY: MADE IN THE LIVER & SECRETED IN THE PLASMA.
BELONGS TO THE SERPIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SERPIN; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1759 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chordata; Craniata; Vertebrata; Perissodactyla; Equidae; Equus.
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8
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83.3%;
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23
                                                     .18;
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                                                                                                                                                                                                                                                                                                                                    Herwig S
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                                 Score 24; DB
Pred. No. 4.1e
6; Mismatches
                                   6;
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ANGIOTENSIN
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Pred.
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                                                                                                                           65583C6D1FB7C25B CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                      S., Meyer O.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                    dehydrogenase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   on update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           update)
                                                                                                                                                                                                                                                                             ACCEPTOR -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14
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                                                                      DB 1;
                                                   .1e+02;
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                                                                  Length 14;
                                                                                                                                                                                                                                                                                                                                  structural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.2.99.2)
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                               Indels
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                                                                                                                                                                                                                      MEDIUM,
                                                                                                                                                                                                                                                                                                                                  genes
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                             Gaps
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AC P80980;

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 01-NOV-1997 (Rel. 35, Last annotation update)

DT 01-NOV-1997 (Rel. 35, Last annotation update)

DT 01-NOV-1997 (Rel. 35, Last annotation update)

DE CYTOCHROME C OXIDASE POLYPEPTIDE VIIB-HEART (EC 1.9.3.1) (FRAGMENT).

OS Thunnus obesus (Bigeye tuna).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;

OC Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Scombroide:

Combridae; Thunnus.
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Matches 4
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P81668;
15-JUL-1999
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SUBCELLULAR LOCATION: CHLOROPLAST THYLAKOID MEMB
WITH THE PHOTOSYSTEM II COMPLEX (BY SIMILARITY).

HISCELLANDOUS: ON THE 2D-GEL THE DETERMINED PI O
(SPOT N179) IS: 5.9, ITS MW IS: 22 KDA.

SMILLARITY: TO OTHER OEE2 SUBUNITS.

Photosynthesis: Photosystem II; Chloroplast; Thylako
NON_TER

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SEQUENCE 13 AA; 1294 MW; C6772BOD54D7C44D CRC64;
          EUR. J. Blochem. 248:99-103(1997).
-i- FUNCTION: THIS PROTEIN IS ONE OF CHAINS OF CYTOCHROME C OXIDASE, 1
MITOCHONDRIAL ELECTRON TRANSPORT
-i- CATALYTIC ACTIVITY: 4 FERROCYTOCI
                                                                                                 MEDLINE; 97454291.
Arnold S., Lee I.,
Kadenbach B.;
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15-JUL-1999 (Rel. 38, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
0XYGEN-EVOLVING ENHANCER PROTEIN 2 (OEE2) (23
EVOLVING SYSTEM OF PHOTOSYSTEM II) (FRAGMENT)
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Costa P., Pionneau C., Frigerio J.-M., Plomion
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Eukaryota; Viridiplantae; Embryophyta; Tracheophyta;
Coniferopsida; Coniferales; Pinaceae; Pinus.
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Perfect score:
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Copyright (c) 1993 - 2000 Compugen Ltd
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MDH_SYNY4
DRPH_UCAPU
ATPB_PHYPA
TRYP_PROAT
GS15_BACSU
SODM_CANFA
UP21_UPEIN
UP25_UPEIN
UP25_UPEIN
UPA5_CALVO
ALL5_CYDPO
                GRĀR_RANRU
ORCK_ORCLI
LMA2_LOCMI
FLA2_BARBA
HBB2_UROHA
CAOB_RAT
CSPS_STRTR
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	atch cal		SIMILARITY). SUBCELLULAR SIMILARITY: (ASE; FBqn001	FUNCTION: IMPLICATED IN MITOCHONDRIAL PROTEIN IMPORA MACROMOLECULAR ASSEMBLY. MAY EACILITATE THE CORRECT IMPORTED PROTEINS. MAY ALSO PREVENT MISTOLDING AND IRPORTED PROPER ASSEMBLY OF UNFOLDED POLYPEPTII UNDER STRESS CONDITIONS IN THE MITOCHONDRIAL MATRIX		SEQUENCE. STRAIN=VALLECAS; MEDLINE; 9327285 Santaren J.F., v	MMP-P1 OK HSPO: Drosophila melanogaster (Fr Eukaryota; Metazoa; Arthrop Pterygota; Neoptera; Endopt Ephydroidea; Drosophilidae;	01-JUN-1994 (Rel. 29, 01-JUN-1994 (Rel. 29, 01-JUN-1998 (Rel. 37, 15-DEC-1998 (Rel. 37, MITOCHONDRIAL MATRIX PROTEIN 60) (HSP-60)	DROME		17 17 17 17 17 17 17 17
LLLQMDFGFPK :::: : VIIEQSWGSPK	Similarity 3; Conser	IPR001844; ps00296; CH ; ATP-bindi 1 11 11 AA; 1	RITY). JULAR RITY: Bgn001	ON: IM DLECUL ED PRO [NG AN	ido A tion gel	ALLECAS; 93272852 J.F., va	melanogas melazoa; Metazoa; Neoptera;	(Rel. (Rel. (Rel. (Rel. (HSP-	S		15.3 15.3 15.3 15.3 15.3 15.3 15.3
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(Rel. 01, Created)
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(Rel. 33, Last annotation update)

STANDARD;

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ADP/ATP carrier protein - yeast (Candida parapsilosis) (fragment)
C:Species: Candida parapsilosis
C:Date: 28-Jun-1991 #sequence_revision 28-Jun-1991 #text_change 07-Jun-1996
C:Accession: A37984
R:Guerin, B.: Bukusoglu, C.; Rakotomanana, F.; Wohlrab, H.
J. Biol. Chem. 265, 19736-19741, 1990
A.Title: Mitochondrial phosphate transport. N-ethylmaleimide insensitivity correlates with A:Reference number: A37984; MUID:91060585
A:Accession: A37984; MUID:91060585
A:Accession: A37984; MUID:91060585
A:Molecule type: protein
A:Residues: 1-20 <GUE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C:Date: 22-Dec-1995 #sequence_revision 08-Feb-1996 #text_change 15 Jun-1996 C:Accession: PN0175 R:Tsugita, A.; Kamo, M.; Kawakami, M.; Ohki, Y. submitted to JIPID, December 1995 A. Description: Two dimensional electrophoresis of plant proteins and standardization A:Becstion: PN0173 A:Accession: PN0173 A:Accession: PN0175 A:Molecule type: Protein A:Residues: 1-18 <TSU> A:Beperimental source: leaf C:Keywords: transferase
Search completed: December 21, 2000, 08:37:13 Job time: 317 sec
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A37984
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                                                                                                                                                                                                              Query Match 21.6%;
Best Local Similarity 57.1%;
Matches 4; Conservative
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Best Local Similarity 80.0%;
Matches 4; Conservative
                                                                                                                    12 HLLVDFL 18
: |:|||
5 NFLIDFL 11
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Pred. No. 9.8e+02;
0; Mismatches 1; Indels.
                                                                                                                                                                                                              Score 24; DB 2; Length 20; Pred. No. 1.1e+03; 2; Mismatches 1; Indels
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δÃ В

consists of three polypeptide chains: large,

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RESULT 10
A01250
A01250
C; Species: Equus caballus (domestic horse)
C; Species: Equus caballus (domestic horse)
C; Species: 1-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 20-Mar-1998
C; Accession: A92775; A01250
R; Skeggs Jr., L.T.; Kahn, J.R.; Lentz, K.; Shumway, N.P.
J. Exp. Med. 106, 439-453, 1957
A; Reference number: A92775
A; Accession: A92775
A; Accession: A92775
A; Accession: A92775
A; Molecule type: protein
A; Residues: 1-14 <SKE>
C; Superfamily: antithrombin III
S; 1-10/Product: angiotensin I #status experimental <AN1>
F; 1-8/Product: angiotensin II #status experimental <AN2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6-phosphofructokinase (EC 2.7.1.11) B - rabbit (fragment)
N;Alternate names: phosphofructo-1-kinase B
N;Alternate names: phosphofructo-1-kinase B
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change 28-Apr-1993
C;Date: 38-Feb-1990 #text_change 28-Apr-1993
C;Accession: S03879
R;Valaitis, A.P.; Foe, L.G.; Kwiatkowska, D.; Latshaw, S.P.; Kemp, R.G.
Biochim. Biophys. Acta 995, 187-194, 1989
A;Title: The sites of phosphorylation of rabbit brain phosphofructo-1-kinase |
A;Reference number: S03878; MUID:89194250
A;Accession: S03878; MUID:89194250
A;Molecule type: protein
A;Residues: 1-13 <VAL->
A;Note: the sequence from the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with that from table I approach the summary is inconsistent with t
carbon-monoxide dehydrogenase (EC 1.2.99.2) medium chain - Pseudomonas carboxydoflava C;Species: Pseudomonas carboxydoflava C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 28-Apr-1993 C;Accession: PL0142 R;Kraut, M.; Hugendieck, I.; Herwig, S.; Meyer, O. Arch. Microbiol. 152, 335-341, 1989 Arch. Microbiol. 152, 335-341, 1989 A;Reference number: PL0138; MUID:90055678 A;Accession: PL0142 A;Molecule type: protein
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PL0142
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5; Conserv
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6.8e+02;
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7.4e+02;
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C;Comment: Carbon-monoxide dehydrogenase
C;Keywords: oxidoreductase
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A; Residues: 1-15 <OLI>
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Best Local Similarity
"hes 6; Conserv
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A; Residues: 1-17 <LOH>
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PN0175
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Matches 5; Conserv
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N;Contains: angiotensin I
C;Species: Canis lupus familiaris (dog)
C;Date: 30-Sep-1993 #sequence_revision
C;Accession: A60834
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C:Keywords: glycoprotein; plasma
F;1-10/Product: angiotensin I #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 angiotensin I precursor - dog (fragment) N; Alternate names: angiotensinogen I
                                                                                                                                                                                                                                                                                                                                       C;Species: Homo sapiens (man)
C;Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 05-Nov-1999
C;Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 05-Nov-1999
C;Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 05-Nov-1999
C;Accession: B31769
A;Ccession: B31769
A;Accession: B31769
A;Accession: B31769
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A;Title: Purification and partial characterization A;Reference number: A60834; MUID:88113996
A;Accession: A60834
                                                                                                                                                                                                                                                                  A;Cross-references: GB:L36386; NID:g540455; PIDN:AAA61108.1; PID:g540456 C;Keywords: T-cell receptor
glutathione transferase (EC 2.5.1.18) 1 - Arabidopsis thaliana (fragment) C; Species: Arabidopsis thaliana (mouse-ear cress)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   receptor delta-2 chain J region - human (fragment)
ies: Homo sapiens (man)
                                                                                                        1 LLLQMDFGFPKHLLVD
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1 LTAQLFFGKGTQLIVE
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Pred. No.
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Pred.
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No. 9
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8e+02;
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9.2e+02;
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A;Note: the source is designated as Phormidium Lapideum C;Comment: This enzyme catalyzes a reversible oxidative deamination of L-alanine to C;Superfamily: alanine dehydrogenase; alanine dehydrogenase homology! C;Keywords: oxidoreductase
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A;Title: Rat brain hexokinase: amino acid
A;Reference number: A90080; MUID:87324917
A;Accession: A32521
A;Molecule reserved.
                                                                                                                                                                                                                                R;Sawa, Y.; Tani, M.; Murata, K.; Shibata, H.; Ochiai, H.
J. Biochem. 116, 995-1000, 1994
A;Title: Purification and characterization of alanine deh
A;Reference number: PX0078; MUID:95204408
A;Accession: PX0078
                                                                                                                                                                                                                                                                                                                                 alanine dehydrogenase (EC 1.4.1.1) - oscillatoriacean cyanobacterium (fragment) (Species: oscillatoriacean cyanobacterium C:Date: 22-Apr.1995 #sequence_revision 26-May-1995 #text_change 07-May-1999
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                                                                                                                                                                                                     A; Molecule type: protein A; Residues: 1-21 <SAW>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Alcaligenes eutrophus
C;Date: 27-Apr-1996 #sequence_revision 13-Mar-1997 #text_change 07-May-1999
C;Accession: S59492
R;Friedebold, J; Mayer, F; Bill, E; Trautwein, A.X.; Bowlen, B.
Biol. Chem. Hoppe-Seyler 376, 561-568, 1995
A;Title: Structural and immunological studies on the soluble formate dehydron, Reference number: S59492; MUID: 96145736
A;Accession: S59492
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A;Molecule type: prote
A;Residues: 1-15 <FRI>
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A;Residues: 1-21 <SCH>
C;Superfamily: human hexokinase I; hexokinase homology
C;Keywords: ATP; glycolysis; phosphotransferase
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Matches 5
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                                               Similarity 4; Consert
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                                                                      A; Molecule type: protein A; Residues: 1-14 <SHI>
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A; Residues: 1-16 <ALE>
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47.1%;
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R;Shimeno, H.; Toda, A.; Ogata, S.; Nagamatsu, A. Drug Metab. Dispos. 19, 291-297, 1991
A;Title: Purification and aminopyrine monooxygenase A;Reference number: A61597; MUID:91292910
A;Accession: B61597
                                                                                                                                    cytochrome P450 AL-2 - rat (fragment)
c:Species: Rattus norvegicus (Norway rat)
C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995
C:Accession: B61597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ornithine carbamoyltransferase (EC 2.1.3.3), anabolic - Aeromonas formicans (fragment C;Species: Aeromonas formicans C;Date: 30-Sep_1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999 C;Accession: A60743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: Evolutionary relationships among bacterial carbamoyltransferases A;Reference number: A60743; MUID:90188287 A;Accession: A60743
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submitted to the EMBL Data Library, May 1996
A:Reference number: 822873
A:Accession: T44936
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5.9e+02;
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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Copyright (c) 1993 - 2000 Compugen Ltd
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                                                                                                                                            dermorphin - Rohde
virG protein - Agr
Ig heavy chain CRD
1-aminocyclopropan
photosystem II oxy
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protein QF200070 -
T-cell receptor de
acid ribonuclease
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angiotensin I prec
T-cell receptor de
glutathione transf
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6-phosphofructokin
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ALIGNMENTS

C;Accession: A39504

R;May, G.; Sutton, C.; Gould, H.
J. Biol. Chem. 266, 3052-3059, 1991

A;Title: Purification and characterization of Ku-2, an octamer-binding protein relate A;Reference number: A39504; MUID:91131605

A;Accession: A39504

A;Status: preliminary A;Molecule type: protein A;Residues: 1-19 <MAY> octamer-binding protein, Ku-like, 72K chain - human (fragment) C;Species: Homo sapiens (man) C;Date: 30-Dec-1991 #sequence_revision 30-Dec-1991 #text_change 30-Sep-1993

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dermorphin (Lys-7) [validated] - two-colored leaf frog
C;Species: Phyllomedusa bicolor (two-colored leaf frog)
C;Date: 10-Dec-1993 *sequence_revision 13-Mar-1997 *text_change 31-Mar-2000
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S36662
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Best Local Similarity
"hes 5; Conserv?
                                                                                                                       FEBS_Lett. 302, 151-154, 1992
A;Title: Identification and characterization A;Reference number: S21152; MUID:92339502
A;Accession: S36662
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-7 <MIG>
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Best Local S
Matches 4
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11 LEMDVGF 17
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FGYPK 7
                       FGFPK 11
                                                                     Similarity
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                                                                     24.3%;
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Pred. No. 2.3e+02;
1; Mismatches 1
                                                         Score 27; DB 2; Le
pred. No. 1.8e+05;
uncmatches 0;
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RESULT A32521

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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS 5.0
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/977,696C
FILING DATE: 11-16-92
CLASSIFICATION: 435
ATTORNEY_AGENT INFORMATION:
NAME: Amzel Ph.D., Viviana
REGISTRATION NUMBER: 966 38227
TELECOMMUNICATION INFORMATION:
TELEPHONE: (510) 748-6868
TELEX: n.a. 1010 748-688
TELEX: n.a. 2010 NO: 36:
SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: peptide
US-07-977-696C-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TOPOLOGY: linear
; MOLECULE TYPE: No. 6046166e
US-08-940-096-133
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Best Local Similarity
"arches 6; Conserva
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US-07-977-696C-36
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:earch completed: December 21, 2000, 08:36:43 , rob time: 387 sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: do Couto, Fernando J.R.
APPLICANT: Ceriani Dr., Roberto L.
APPLICANT: Peterson Dr., Derry A.
APPLICANT: Padlan Dr., Eduardo A.
TITLE OF INVENTION: Analogue Peptides with Specificity
TITLE OF INVENTION: For Carcinomes and Kit and Diagnostic Vaccination
TITLE OF INVENTION: and Therapeutic Methods.

NUMBER OF SEQUENCES: 81
CORRESPONDENCE ADDRESS:
ADDRESSE: PRETTY, SCHROEDER & POPLAWSKI
STREET: 444 South Flower Street, Suite 2000
CITY: Los Angeles
STATE: California
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 36, Application US/07977696C Patent No. 5792852
                                                                                                                                                                                           Query Match 24.3%; Score 27; DB 1; L6 Best Local Similarity 41.2%; Pred. No. 1.6e+02; Matches 7; Conservative 2; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
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7 ERLLEDLLQALN 18
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                                                                                                                                                 5 MDFGFPKHLLVDFLQSL 21
                                                                                                              MDFGLSLVFLVLILKGV 17
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milarity 50.0%;
Conservative :
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Best Local Similarity

Matches 6; Conserv
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Patent No.
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ATOMEY/AGENT INFORMATION:
ATOMEY COCULTY I Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 0091
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEPHONE: 650-493-5556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US
FILING DATE: 29-SEP-1(
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 66141 PENNIE NFORMATION FOR SEQ ID NO:
                            COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/940
FILING DATE: 29-SEP-1997
                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                  TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 22 amino acids
TYPE: amino acid
STRANDEDNESS: single
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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STATE: NY
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                                                                                                                                                                                  COUNTRY:
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5. 6037323
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                                                                                                                                                                                                                                  E: Pennie & Edmonds LLP
1155 Avenue of the Americas
                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                               Buttner, Klaus
Cornut, Isabelle
Metz, Gunther
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50.0%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 3;
1.3e+02;
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Query Match
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; TOPOLOGY: linear
; MOLECULE TYPE: NO.
US-08-940-093-133
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 133,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Dasseu
                                                                                                 FILING DATE:
ATTORNEY/AGENT INFORMATION:
ANAME: COTUZZI, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 0091
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEPHAX: 650-493-556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 22 amino acids
                                                                TELEFAX: 650-493-5556
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
              SEQUENCE CHARACTERISTICS:
LENGTH: 22 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                      CLASSIFICATION: 530 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: CORUZZI, Laura A
REGISTRATION NUMBER: 30,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Cornut, Isabe
APPLICANT: Metz, Gunther
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: 650-493-4935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/940,096 FILING DATE: 29-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11 KHLLVDFLQSLS 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: New York
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TELEFAX: 650-493-5556
                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 009196-0006-999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
 STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 ERLLEDLLQALN 18
                                                                                                                                                                                                                                                                                                                                                                                                                              10036-2811
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Cornut, Isabelle
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Pred. No.
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RESULT 10
US-08-802-981-112
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OTHER INFORMATION: /product= "Acp"
US-08-802-981-112
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                                                                                                                       RESULT 11
US-08-802-981-113
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                                                                                  Sequence 113, Application US/08802981 Patent No. 6037137
                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                     Query Match
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APPLICATION NUMBER: US/08/
FILING DATE: 20-FEB-197
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Hunter, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (415) 576-0300 INFORMATION FOR SEQ ID NO:
                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Komoriya, Parkard, Beverly S.
APPLICANT: Packard, Beverly S.
TITLE OF INVENTION: Compositions for the Detection of Enzyme
TITLE OF INVENTION: Activity in Biological Samples and Methods of Use Thereof
"""" OF SEQUENCES: 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 38,498
REGISTRATION NUMBER: 010
REFERENCE/DOCKET NUMBER: 010
TELECOMMUNICATION INFORMATION:
TELECHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 21 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE:
APPLICANT: Komoriya, Akira
APPLICANT: Packard, Beverly S.
TITLE OF INVENTION: Compositio
TITLE OF INVENTION: Activity i
                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
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STATE: Calif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.30
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                                                                                                                                                                                          10 LDAEFGXPK 18
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les 5; Conserva
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55.6%;
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 Compositions for the Detection of Enzyme Activity in Biological Samples and Methods of Use Thereof
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Pred. No. 1.2e+02;
1; Mismatches 3
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Best Local Similarity
The S; Conserve
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Patent No. 6004925
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INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                            GENERAL INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                             APPLICANT: Dufourcq, Jean
TITLE OF INVENTION: APOLIPPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
                                                                                                                             APPLICANT:
                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                              APPLICANT:
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LOCATION:
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STREET:
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                                ADDRESSEE:
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New York
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                                                                                                                                                                                                                                             Application US/08940095
                 E: Pennie & Edmonds LLP
1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                            Buttner, Klaus
Cornut, Isabelle
                                                                                                                             Metz, Gunther
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Pred. No. 1.2e+02;
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; TOPOLOGY: 1i;
; MOLECULE TYPE:
; HYPOTHETICAL: 1
US-08-370-567-7
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Sequence 7, A
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Best Local Similarity 40...
6; Conservative
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NAME: Green, Grant D.
REGISTRATION NUMBER: 31,259
REFERENCE/DOCKET NUMBER: 0941
TELECOMMUNICATION INFORMATION:
TELEPHONE: 510-601-2706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: 510-601-270
TELEFAX: 510-655-3542
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Rosenberg, Steven
APPLICANT: Doyle, Michael
APPLICANT: Goodson, Robert
TITLE OF INVENTION: Peptide Inhibitors of Urokinase Receptor
TITLE OF INVENTION: Activity
NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
                                                                                                  CLASSIFICATION: 536
PRIOR APPLICATION NUMBER: 1
                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIJUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                               ATTORNEY/AGENT INFORMATION:
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LENGTH: 17 amino acids
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CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/061,514
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
NAME: Green, Grant D. REGISTRATION NUMBER: 31,259
                                                                                                                                                                                                                                                                                                                                  STREET: 4560 Horton Street CITY: Emeryville STATE: CA
                                                     APPLICATION NUMBER: US/08/061,514 FILING DATE:
                                                                                                                                                                                                                                                                                                   COUNTRY: U:
ZIP: 94608
                                                                                                                                                         APPLICATION NUMBER: FILING DATE:
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)GY: linear
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46.2%;
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Best Local Similarity
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PCT-US94-05684-7
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Best Local Similarity 46.
Matches 6; Conservative
                                                                                                                                                                                                                                         TELEFAX: 510-655-3542
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                     ATTORNEY AGENT INFORMATION:
NAME: Green, Grant D.
REGISTRATION NUMBER: 31,259
REFERRNCE/DOCKET NUMBER: 0941
TELECOMMUNICATION INFORMATION:
TELEPHONE: 510-601-2706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
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TYPE: amino acid
TOPOLOGY: linear
NOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/05684
FILING DATE: 19 MAY 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Chiron Corporation TITLE OF INVENTION: Peptide I TITLE OF INVENTION: Activity NUMBER OF SEQUENCES: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 510-601-2706
TELEPFAX: 510-655-3542
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                                                                                                                                                                                                                                          TELEPHONE: 510 C. TD NO:
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CITY: Emeryville
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                                                                                                                                                                                TOPOLOGY: linear
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                          3 LQMDFGFPKHLLV 15
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LEMDLWHDKHILL 16
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                                                                                                                                                                                                         17 amino acids
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                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                             . peptide
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                                                                       25.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide Inhibitors of Urokinase Receptor
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                                                                       Score 28; DB 4;
Pred. No. 96;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                          Mismatches
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96;
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                                                         Indels
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                                                       Gaps
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RESULT 5
US-08-483-952A-22
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Best Local Similarity
Watches 5; Conservi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 415-398-3249
INFORMATION FOR SEQ ID NO:
SEQUENCE-CHARACTERISTICS:
                                                                                     CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/716,909
FILING DATE: 18-JUN-1991
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/586,536
FILING DATE: 21-SEP-1990
CLASSIFICATION: 536
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
NAME: NAME: 31,801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: A-60780-12/RFT/MTK TELECOMMUNICATION INFORMATION: TELEPHONE: 415-781-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/586,536
FILING DATE: 21-SEP-1990
                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/483,952A FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 536
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: peptide
             ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-6
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
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                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 0:
FILING DATE: 17-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert STREET: Four Embarcadero Center, Suite 3400 CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
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linear
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                                                                                                                                                                                                                                                                                       08/123,859
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                 A-60780-7/RFT/MTK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/08/341,018A CURRENT FILING DATE: 1994-11-17 NUMBER OF SEQ ID NOS: 87 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4 Patent No.
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Best Local
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Best Local Similarity 44.4
Matches 4; Conservative
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Bermingham-McDonogh, Olivia
APPLICANT: Goldin, Stanley M.
APPLICANT: McBurney, Robert N.
TITLE OF INVENTION: USE OF NEUREGULINS AS MODULATORS
TITLE OF INVENTION: CELLULAR COMMUNICATION
FILE REFERENCE: 04585/041001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Gywnne, David I.
APPLICANT: Mahanthappa, Nagesh K.
APPLICANT: Marchionni, Mark A.
APPLICANT: Bermingham-McDonogh, O
                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Rosenberg, Steven
APPLICANT: Doyle, Michael
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TYPE: PRT
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                                                                                                            APPLICANT: Goodson, Robert TITLE OF INVENTION: Peptide TITLE OF INVENTION: Activit NUMBER OF SEQUENCES: 37
                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
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                               STREET: 4500
CTTY: Emeryville
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                                                                                                                                                                                                                                                                                                                                                   11 KHLLVDFLQ 19
COUNTRY: UZIP: 94608
                                                ADDRESSEE: CHILC. STREET: 4560 Horton Street
                                                                                                                                                                                                                                                                                                                         1 KHLGIEFME 9
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                                                                              Chiron Corporation
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                                                                                                                            Peptide Inhibitors of Urokinase Receptor Activity
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Pred. No. 78;
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Pred. No. 1.
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RESULT 3
US-08-484-530-22
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-765-783A-83
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                                                                                                         Sequence 22, Application US/08484530 Patent No. 5846740
                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 5; Conserv
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                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: MUTAShige, Kate H
REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 3502
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L.
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 07-MAR-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Reshaped Human Antibody
TITLE OF INVENTION: Interleukin-8
NUMBER OF SEQUENCES: 105
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 07-MAR-1997
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Tsuchiya, Masayuki
APPLICANT: Yamazaki, Tatsumi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 2000 Pen
CITY: Washington
STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 202-822-0168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: MORRISON & FOERSTER
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Matsumoto, Yoshihiro
Yamada, Yoshiki
                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                    Score 29;
Pred. No.
                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                    Indels
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Query Match
Best Local Similarity
Thehes 5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 22, Application US/08827618A Patent No. 5998366
GENERAL INFORMATION:
APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L.
                             COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATEL
COMPUTER: DATA:
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIAN Release #1.0, Version #1.30
CURRENT APPLICATION NATA:
APPLICATION NUMBER: US/08/827,618A
FILING DATE: 09-APR-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/485,725
FILING DATE: 07-UN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-60
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
TELEPAX: 415-398-3249
INFORMATION FOR SEQ ID NO: 22:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/UB/TOTAL APPLICATION NUMBER: US/UB/TOTAL APPLICATION NUMBER: US/UB/TOTAL APPLICATION: 435

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION: NAME: Trecartin, Richard F.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: US
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert STREET: Four Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Kaufman, Daniel L.
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: Four Embarca
CITY: San Francisco
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: US
ZIP: 94111-4187
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TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
APPLICATION NUMBER:
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Match
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1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*
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14.254 Million cell updates/sec
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GenCore version Copyright (c) 1993 - 2000
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US-08-802-981-133
US-08-940-095-133
US-08-940-096-133
US-08-940-996-133
US-08-129-930B-36
US-08-129-930B-36
US-08-706-741B-83
US-08-706-741B-83
US-08-799-724-47
US-08-924-6526-37
US-08-09-426A-47
US-08-09-476B-63
US-08-394-652C-37
US-08-394-652C-37
US-08-398-181A-16
US-08-208-181A-12
US-08-208-181A-12
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US-08-765-783A-83

US-08-446-530-22

US-08-827-618A-22

US-08-827-618A-22

US-08-483-952A-22

US-08-341-018-40

US-08-341-018-40

US-08-370-567-7

US-08-438-759-7
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21, Appl
16, Appl
22, Appl
10, Appl
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7, Appli

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US-08-199-508-2
                                                                             ; MOLECULE TYPE:
; HYPOTHETICAL:
US-08-199-508-2
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                       Query Match
Best Local Similarity
Matches 5; Conserv
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CITY: E
STATE:
ZIP: 8
                                                                                                                        LENGTH: 20
TYPE: amino acid
                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
     7 FGFPKHLLVDFLQ 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION:
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25	25	25	25	25	25	25.5	25.5	26	26	26	26	26	26	26	26	26
22.5	22.5	22.5	22.5	22.5	22.5	23.0	23.0	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4
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sequence 29, Appr	Sequence 29, Appr	200	Sequence 65, Appl	`	•	•	Sequence 18, Appl	Patent No. 5248607			Sequence 114, App	Sequence 20, Appl	Sequence 52, Appl	Sequence 52, Appl	Sequence 71, Appl	Sequence 52, Appl

ALIGNMENTS

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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch
MEDIUM TYPE: Diskette, 3.50 inch
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.0.1
SOTTWARE: Microsoft Word 5.0a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/199,500
FILING DATE: February 18, 1994
                                                                                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UMBER: 08/021,536
FILING DATE: February 23, 1993
ATTORNEY,AGENT INFORMATION:
NAME: NO. 5717058ak, Henry P.
REGISTRATION NUMBER: 3320
REFERENCE/DOCKET NUMBER: 121 CII
TELECOMMUNICATION INFORMATION:
TELEPHONE: 303-541-332
TELEPHONE: 303-441-3013
                                                                                                                                           TELEFAX: 303-444-3013
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Matthews, Page 1.
APPLICANT: Stetler, Gary L.
APPLICANT: Anthony-Cahill, Spencer J.
APPLICANT: Anderson, David C.
APPLICANT: Anderson, David C.
TITLE OF INVENTION: Modulators of Gene Expression
TITLE OF TROUBLENCES: 57
                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2, Application US/08199508
3. 5717058
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Stetler, Gary L.

Stetler, Gary L.

Anthony-Cahill, Spencer J.

Anthony-David C.

Anthony-Takors of Gene
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ייה to ב
ב: peptide
yes
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RESULT
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Matches, 5; Conserv
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                                                                                   The sequences given in R6127-316 represent peptides which are derived from the HTLV transactivating protein, Tax. These peptides were preferably synthesised as C-terminal amides, and are not acylated on the N-terminus. These peptides may be used as regulators of host cell transcription, as they modulate other protein-protein interactions which regulate transcription in a cell. These peptides inhibit gene transcription in a viral host cell which is subject to regulation by proteins or factors that originate from a virus. These peptides specifically act by blocking a binding site, or by mimicing or simulating binding characteristics of the target molecule.
                                                                                                                                                                                                                               Disclosure; Page 29; 132pp; English.
                                                                                                                                                                                                                                                      Regulators of cellular gene transcription - useful in pharmaceutical compsns for preventing or treating diseases due to unregulated DNA by transcription
                                                                                                                                                                                                                                                                                                          WPI; 1994-294336/36
                                                                                                                                                                                                                                                                                                                                                                                     23-FEB-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                      01-SEP-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               W09419473-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HTLV; transactivating protein; protein-protein interaction; ir binding site; target molecule.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                effective against antibiotic-resistant strains, and may replate antibiotic therapy or increase its effectiveness. The present sequence is shown in the specification.
                                                                                                                                                                                                                                                                                                                                                           (SOMA-)
                                                                                                                                                                                                                                                                                                                                                                                                            23-FEB-1994;
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                                                                                                                                                                                                                                                                                                                                 Anthony-Cahill
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
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               27.0%;
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Pred. No.
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inhibition; virus; regulation;
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              DB 15;
1.4e+02;
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                                                                                                                                                                                                                                                         Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tax protein fragment; HTLV-1; human T-cell leukaemia virus; hepatitis human lymphotropic virus; trans-activating factor inhibitor; therapy; Tax-dependent transcription; viral infection; genetic disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; column 41-42; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Trans-activating factor inhibitory peptide(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1998-144847/13
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23-FEB-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US5717058-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human lymphotropic virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tax protein fragment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-FEB-1998
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fgypvyvfgdcvq
                                                      FGFPKHLLVDFLQ
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93US-0021536
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                                                                                                            Score 30;
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RESULT
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Best Local
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The invention relates to antibodies that bind to a fibronectin-binding domain of a fibronectin-binding protein, and inhibit binding of the protein to fibronectin. Also claimed are: (1) isolated peptides of a fibronectin-binding protein that do not bind to fibronectin; (2) fusion protein containing at least one peptide of a fibronectin-binding protein linked to a second amino acid sequence; (3) nucleic acid encoding the isolated peptide of (1). Antibodies, the isolated peptides of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          microbial surface components recognising adhesive matrix mole
MSCRAMM; fibronectin; fibronectin-binding protein; antibody;
antibiotic; bacterial infection; antibiotic-resistant strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                               Antibody that binds to fibronectin-binding protein, preventing binding to fibronectin - used to treat or prevent bacterial infection, especially by Staphylococci and Streptococci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-OCT-1998
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         domain of a fibronectin-binding protein, and inhibit binding of the protein to fibronectin. Also claimed are: (1) isolated peptides of a fibronectin-binding protein that do not bind to fibronectin; (2) fusion protein containing at least one peptide of a fibronectin-binding protein linked to a second amino acid sequence; (3) nucleic acid encoding the isolated peptide of (1). Antibodies, the isolated peptides of (1) and the nucleic acids are all useful for immunisation (active or passive) and (by inhibiting binding of bacteria to fibronectin) for preventing or treating infection in humans or other animals, particularly by staphylococci or streptococci, e.g. meningitis, othics media, endocarditis, mastitis in cattle, abortion in horses and many
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                                                                                                                                                                                                                                                     bacterial
                                                                                                                                                                                                                                                                                                                                          Patti
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                                                                                                                                                                                                                                                                  preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            epitope;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 28.
Best Local Similarity 61.
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            as compared to the human protein only.

The invention relates to 125 novel genes and their fragments (nucleic acid sequences: x84933-x85057; amino acid sequences x27567-y27933) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polypeptides in a sample or by determining the presence of mutations in the new polynucleotides. Specific uses are described for each of the 125 polynucleotides, based or specific uses are described for each of the 125 polynucleotides, based or specific uses are described for each of the 125 polynucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-NOV-1997;
17-NOV-1997;
17-NOV-1997;
17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              microbial surface components recognising adhesive matrix molecule; MSCRAMM; fibronectin; fibronectin-binding protein; antibody; epitope; antibiotic; bacterial infection; antibiotic-resistant strain.
                                                                                                                 21-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                             W09831389-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                     Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fibronectin binding protein-derived peptide #34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   clone detailed in the descriptor line. The gene can be used to gene fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. X84924) for increasing the stability of the fused protas compared to the human protein only.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New human secreted proteins and coding sequences useful for treating disorders of the immune system and hyperproliferative disorders % \left( 1\right) =\left( 1\right) +\left( 1\right
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Carter KC, Ebner R,
Kyaw H, Lafleur DW,
                                 (TEXA ) UNIV TEXAS A & M SYSTEM
                                                                                                                                                                                             21-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W65690
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 PKHLLVDFLQSLS
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η SM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14
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97US-0066094.
97US-0066095.
97US-0066089.
                                                                                                                 97US-0036139
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                                                                                                                                                                                                                                                                                                                                                                                                                                         aureus
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W, Moore PA, Ni
Soppet DR, Wei 1
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Pred. No.
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i J,
Y;
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Olsen HS, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
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Query Match
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                                                                                                                                                                                                                                                                                                                          The invention relates to antibodies that bind to a fibronectin-binding commain of a fibronectin-binding protein, and inhibit binding of the protein to fibronectin. Also claimed are: (1) isolated peptides of a commain of a fibronectin. Also claimed are: (1) isolated peptides of a commain containing at least one peptide of a fibronectin-binding protein that do not bind to fibronectin-binding protein that do not bind to fibronectin-binding protein containing at least one peptide of a fibronectin-binding protein containing at least one peptide of a fibronectin-binding protein containing at least one peptide of a fibronectin-binding protein containing at least one peptide of a fibronectin-binding protein contained the nucleic acid sequence; (3) nucleic acid encoding containing the nucleic acids are all useful for immunisation (active or containing and containing infection in humans or other animals, particularly by staphylococci or streptococci, e.g. meningitis, otitis media, preventing or treating infection in humans or other animals, particularly contents, endocarditis, mastitis in cattle, abortion in horses and many cothers. Since the antibodies block binding of bacteria, they should be contained contained to the contained conta
                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antibody that binds to fibronectin-binding protein, preventing its binding to fibronectin - used to treat or prevent bacterial infection, especially by Staphylococci and Streptococci
                                                                                                                                                                                                                                                                                                              scan).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; Page 101; 201pp; English.
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: || | || || 4 yqfpphnsvdf 14
                                                        7 FGFPKHLLVDF 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             House-pompeo KL,
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                                                                                                                Conservative
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                                                                                                                                           28.8%;
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                                                                                                                                        Score 32;
Pred. No.
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                                                                                                             Mismatches
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                                                                                                                                  DB
70;
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CY 11
CY 11
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CY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Interferon-gamma; IFN; receptor protein; phosphorylated; cytoplasmic transcription factor; STATlalpha; STAT2; signal transducers and activators of transcription; STAT
                                                  WPI; 1996-321801/32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-JUL-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9620211-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R98414 standard; peptide; 16 AA
                                                                                                                                            Harpur AG,
                                                                                                                                                                                                                                                                                                                                                                                                                                22-DEC-1995;
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                                                                                                                                                                                                                                           LUDWIG
                                                                                                                                            Lackmann M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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Best Local S
Matches 5
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Multi-class hybrid interferon polypeptide(s)
                                   WPI; 1988-219882/31.
                                                                                                             15-JUL-1985;
19-JAN-1983;
                                                                                                                                                   15-JUL-1985;
                                                                                                                                                                           19-JUL-1988
                                                                                                                                                                                                  US4758428-A
                                                                                                                                                                                                                                      Misc-difference
                                                                                                                                                                                                                                                                                               Alpha-beta hybrid interferon; multi-class hybrid interferon; antitumour; antiviral; therapy.
                                                                                                                                                                                                                                                                                                                                                              17-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                     P80053;
                                                                                                                                                                                                                                                                                                                                                                                                             P80053 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Multi:class hybrid interferon poly:peptide(s) - with restricted antiviral and cell growth regulatory activities
                         N-PSDB; n80050
                                                              Mark DF,
                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1983-723186/30
                                                                                     (CETU ) CETUS
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5; Conserv
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                                                             Creasey AA;
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                                                                                                                                                                                                                                                                                                                                      human
                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                     CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA;
                                                                                                             85US-0755265
83CA-0419758
                                                                                                                                                  85US-0755265
                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                         /note="Residue 40"
                                                                                                                                                                                                                                                                                                                                                                                                            protein; 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61pp; English.
                                                                                                                                                                                                                                                                                                                                    interferon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28.8%;
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Pred. No. 37;
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                  (huIFN) alpha-61A gene around AA
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37;
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                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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and trp leader ribosome binding site preceoperator, encoding an ATG initiation codon and using HindIII site that was inserted, 59 nucleotides 3'-end of the TGA translational stop codon, to insert the gene into the plasmid pBW11 (a deriv of pBR322 having a deletion between the HindIII and PvuII sites). The complete DNA sequence of the promoter and gene fragments inserted between the EcoRI and HindIII sites of pBW11 is shown in n80049. The hybrid gene was constructed by taking advantage of the homologies between huIFN alpha-61A & huIFN beta-1 at around AA 40 of both proteins. The DNA sequence 5'-proximal to the DRA sequence cutting site of the huIFN alpha-61A DNA is ligated to the DNA sequence 3'-proximal to the site of huIFN beta-1, to create a fusion of the two cones while preserving the translational reading from of both
                                                      two
                                                                                                                                                                                                                                                                                                                                                                                                                            Multi-class hybrid IFN polypeptides having an AA sequence composed of 2 distinct subsequences are claimed. The plasmids used in the construction of huFN-alpha-61A-beta-1 hybrid are plasmids palpha61A and pDM101/trp/beta-1. Assembly of the palpha61A plasmid invovled replacing
Sequence
                                                                                                                                                                                                                                                                                                                                                                               the DNA fragment encoding the 23 AA signal polypeptide of preinterferon with a 120BP EcoRI/Sau3A promoter fragment E.coli trp promoter, operato
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                having sequence from interferon-alpha-1 and sequence from interferon-beta-1 for restricted activity
                                                genes while preserving the translational reading frame of both
12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17;
AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English
                                                                                                                                                                                                                                                                                                                                                                               operator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and
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RESULT
Y27814
                                                                      Вb
                                                                                    Qy
                                                                                             Query Match
Best Local Similarity
"hes 5; Conserv?
30-JUL-1999
                              Y27814 standard;
                                                                   2 dfgfpq 7
                                                                                     6 DEGFPK 11
                                              9
                                                                                                    Conservative
(first entry)
                               Protein; 14 AA
                                                                                                            28.8%;
83.3%;
                                                                                                     1;
                                                                                                            Score 32;
Pred. No.
                                                                                                     Mismatches
                                                                                                            DB
37;
                                                                                                                    9;
                                                                                                    0,
                                                                                                                   Length 12
                                                                                                     Indels
                                                                                                   0;
                                                                                                   Gaps
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0;

cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymu osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion; endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm. diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaei developmental abnormality; foetal deficiency; blood; allergy; renal; immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS; Human; secreted protein; fusion protein; gene therapy; protein therapy; Homo sapiens thymus;

Human secreted protein encoded by gene No.

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07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
                                      17-NOV-1997;
07-NOV-1997;
                                                     04-NOV-1998;
                                                                        WO9924836-A1
                                                               20-MAY-1999
       97US-0064908.
97US-0064911.
97US-0064912.
97US-0064983.
97US-0064984.
97US-0064985.
                                      97US-0066100
97US-0064900
                                                     98WO-US23435
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RESULT
W24294
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а
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CC hepatitis B virus (HBV) surface antigen, and sequences (91144 y91155 are CC synthetic epitopes derived from this HBV epitope. Y91157-Y91196, CC Y91227 and Y91242-Y91244 are antigenic peptides comprising an LHRH CC sequence joined to a promiscuous Th epitope. Y91197 is the LHRH target CC antigenic peptide seed in these LHRH antigenic peptides comprising CC somatostatin, and Y91201-Y91207 are antigenic peptides. Y91200 is compristed and a Th epitope. Somatostatin immunogens may be used CC to promote growth in livestock. Y91208 is a human CD4 CDR2-like domain CC antigenic peptides which may be used to prevent HIV infection of TC cells. Y90212 is a modified version of a human IgE (immunoglobulin CE poptides which may be used in the treatment of allergies. Y91220 is CC a peptide derived from foot and mouth disease virus (FMNV) VP1 capsid CC protein and Y91221-Y91212 comprise this peptide and a Th epitope. Y91223 is a Plasmodium faliparum circumsporozolte (CS) target antigen, and Y9123-Y91214 are immunogens comprising a CETP-derived peptides comprise the CS antigen and an MVF Th epitope and may be used in a malaria vaccine. Y91228-Y91231 represent CETP-derived peptides and Y91232-Y91241 are immunogens comprising a CETP peptide and a Th CC cardiovascular disease. Y91247 and Y91252-Y91257 are HTV-1 neutralising C comprising MVH Th and HTV-1 B-cell epitope which may be used to prevent or treat arteriosclerosis and CC antigens that an anti-HTV-1 vaccine. Y91198 and Y9129 are respectively an immunostimulatory invasin protein epitope from Yersinia species, and CC antigenic peptides, both of which may optionally be used in the comprision of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunocastration); for promoting the growth of animals; or for treating allergies or arteriosclerosis. Incorporation of a promiscuous Th (functional in genetically diverse subjects) into an immunogen improves capacity to induce a strong Thelper cell-mediated immune response, resulting in production of antibodies against a target antigen. The can replace carrier proteins and pathogen-derived Thelper epitopes. Sequence Y91121 represents a promiscuous Thelper epitope from the measles virus F (MVF) protein and sequences Y9112-Y91142, Y91266 and Y91245-Y91246 represent synthetic The pitopes based on the MVF The epitope. Sequence Y91113 represents a promiscuous The pitope from the spitope. Sequence Y91113 represents a promiscuous The pitope from the spitope.
                                             Oryctolagus cuniculus
                                                                                                                                                                Human/Rabbit
                                                                                                                                                                                                                17-OCT-1997
                                                                                                                                                                                                                                                                                                       W24294 standard; peptide; 11 AA
                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                Immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hinge spacer peptide, both of which antigenic peptides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dependent cancer, prevention of boar taint in meat, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunotherapy; for inhibition of the action of luteinising hormone releasing hormone (LHRH) for contraception, treatment of hormone-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein (CETP) or HIV epitopes, but more generally against any pathogen, immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Infections (HIV,
                                                                                                                                                                                                                                                                                                                                                                                                                                _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7 FGFPKHLLVDFLQSLS 22
                                                                                                                                                                                                                                                                                                                                                          6
                                                                                                                                                                                                                                                                                                                                                                                                                             fgfpehllvdflqsls 16
                                                                                                         response; high density lipoprotein; HDL; cholesterol; human;
                                                                                     epitope; cholesteryl ester transfer protein; CETP; rabbit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                CETP
                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             foot-and-mouth disease or malaria); for cancer
                                                                                                                                                             common peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 79; DB 21;
Pred. No. 1.5e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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QΥ
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                                                                                                                                                                                                                                                                                                                                                            RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             lipoprotein (HDL) cholesterol in a mammal exhibiting low levels of serum HDL. These peptides represent immunogenic epitopes of cholesteryl ester transfer protein (CETP). The method utilises the body's own immune system to lower CETP levels, thereby increasing the level of beneficial HDL cholesterol, preferably in serum. The method avoids the problems associated with the repeated administration of drugs which have undestrable side effects. This peptide represents a region of CETP which is common to both human and rabbit proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stimulating an immune response to increase high density lipoprotein - avoids repeated administration of toxic drugs to lower cholesteryl ester transfer protein levels
                                             19-JAN-1982;
03-FEB-1983;
                                                                                                         21-JUL-1983
                                                                                                                                                                                                                              Hybrid interferon; antiviral; therapy; cancer; tumour
                                                                                                                                                                                                                                                       Sequence of interferon (HuIFN) -alpha-61A around amino acid 40.
                                                                                                                                                                                                                                                                                                          P30225;
                                                                                                                                                                                                                                                                                                                                P30225 standard; Protein; 12 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequences given in W24292-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 5; Page 16; 26pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Brostoff SW,
         (CETU-) CETUS CORP
                                 15-JUL-1985;
                                                                                18-JAN-1983;
                                                                                                                                 WO8302461-A
                                                                                                                                                                    Misc-difference
                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                   25-MAY-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1997-042849/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9639168-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention to stimulate an immune response to increase high
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (IMMU-) IMMUNE RESPONSE CORP
                                                                                                                                                                                                                                                                                                                                                                                                                        12 HLLVDFLQSLS 22
                                                                                                                                                                                                                                                                                                                                                                                            7
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Carlo DJ, Kwoh DY;
                               82US-0340782.
83US-0463574.
85US-0755265.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95US-0482454.
                                                                                83WO-0900607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96WO-US09143
                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                        /label- AA No. 40
                                                                                                                                                                                                                                                                                                                                                                                                                                              47.7%; Score 53;
100.0%; Pred. No.
ative 0; Mismatci
                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                were used in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 18;
0.015;
                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  density
                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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cc along with B cell epitopes. The Th epitopes and peptide immunogens. Specifically against plasmodium falciparum, cholesteryl ester transport containing them, are used to induce a T helper cell response. CC containing them, are used to induce a T helper cell response. CC specifically against plasmodium falciparum, cholesteryl ester transport containing them, are used to induce a T helper cell response. CC immunoreactive self-antigen or tumour antigen. The Th epitopes and CC immunoreactive self-antigen or tumour antigen. The Th epitopes and CC immunoreactive self-antigen or tumour antigen. The Th epitopes and CC infections (HIV, foot-and-mouth disease or malaria); for cancer cC releasing hormone (LHRH) for contraception, treatment of hormone cC releasing hormone (LHRH) for contraception, treatment of hormone cC releasing hormone (LHRH) for contraception, treatment of hormone cC reating allergies or arteriosclerosis. Incorporation of a promiscuous creating allergies or arteriosclerosis. Incorporation of a promiscuous cresponse, resulting in production of antibodies against a target antigen. CC measles virus f (MVP) proteins and pathogen derived T helper epitopes. CC measles virus f (MVP) protein and sequences y91122-y91142, y91226 and cepitope. Sequence y9113 spreasents a promiscuous Thelper from the contraction of production of antigen. CC synthetic B virus (HBV) surface antigen, and sequences y91196. The protein and sequences y91196. The protein and sequences y91196. The protein antigen on the MVF The protein and pathogen derived from the contraction of the production 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Promiscuous T-cell epitope; measles virus F protein; MVF; hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope; luteinising hormone releasing hormone; LHRH; contraceptive; anticancer; somatostatin; growth promotion; CO4 receptor; HIV-1; antiviral; FMDV; foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; plasmodium falciparum; circumsporozoite; antimalarial; CETP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cholesteryl ester transport protein; anti-arteriosclerotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Y91230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y91230 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-160564/14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W09966957-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                         Y9127 and Y91242-Y91244 are antigenic peptides comprising an Likh sequence joined to a promiscuous Th apitope. Y91197 is the Likh target antigenic peptide used in these Likh antigenic peptides. Y91200 is somatostatin, and Y91201-Y91207 are antigenic peptides comprising somatostatin and a Th apitope. Somatostatin immunogens may be used to promote growth in livestock. Y91208 is a human CD4 CDR2-like domain antigenic site, and Y91209-Y90211 are WVH Th apitope/CD4 CDR2 antigenic paptides which may be used to prevent HIV infection of T cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of a human IGE (immunoglobulin cells. Y90212 is a modified version of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or human immune deficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UNBI-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             invention relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UNITED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page 62; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0100412.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US13975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            peptides comprising the Th epitopes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  transport
              Y90213-Y90219 are Th epitope/IgE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    novel promiscuous T helper cell epitopes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a peptide derived from foot and mouth disease virus (FMU) VPI capsid protein and v91221-v91222 comprise this peptide and a Th epitope. V91223 is a Plasmodium falciparum circumsporozoite (CS) target antigen, and is a Plasmodium falciparum circumsporozoite (CS) target antigen, and y91224-v91225 comprise the CS antigen and an MVF Th epitope and may be used in a malaria vaccine. v91228-v91231 represent CETP-derived peptides and v91232-v91241 are immunogens comprising a CETP peptide and a Th epitope which may be used to prevent or treat arteriosclerosis and cardiovascular disease. v91247 and v91252-v91257 are HIV-1 neutralising B-cell epitopes, and v91248-v91251 and v91258-v91273 are antigenic peptides comprising MVH Th and HIV-1 B-cell epitope which may be used as a component in an anti-HIV-1 vaccine. v91198 and v91199 are respectively an immunostimulatory invasin protein epitope from Yersinia species, and hinge spacer peptide, both of which may optionally be used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           peptides which may be used in the treatment of allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hinge spacer peptide, antigenic peptides of
The invention relates to novel promiscuous T helper cell epitopes and immunogenic peptides comprising the Th epitopes of the inventional ong with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falcinarum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope; luteinising hormone releasing hormone; LHRH; contraceptive; anticancer; somatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMDV; foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; plasmodium falciparum; circumsporozoite; antimalarial; CETP; cholesteryl ester transport protein; anti-arteriosclerotic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human cholesteryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Y91229 standard;
                                                                                                                                                                                                                                                  Wang
                                                                                                                                           New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis or human immune deficiency virus \dot{}
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                          Claim 10; Page 50; 129pp; English
                                                                                                                                                                                                                WPI; 2000-160564/14.
                                                                                                                                                                                                                                                                                 (UNBI-) UNITED BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                                     20-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                       21-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                          WO9966957-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Promiscuous T-cell epitope;
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16; Conserv
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100.0%
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    measles virus F protein; MVF;
ntigen; HBV; immunogenic; B-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein (CETP) peptide,
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Pred. No.
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3.5e-07;
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RESULT
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Best Local Similarity
This sequence represents an immunogenic fragment of the rabbit cholesteryl ester transferase protein (CETP).

The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles. The method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration; pro-atherogenic dyslipoproteinaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New recombinant DNA vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-276984/23
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Pred. No. 1.7e-11;
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Matches 21
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Best Local
                                                                                                                               cholesteryl ester transferase protein (CETP).

The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles and for increasing the HDL cholesteryl besters from HDL particles and for increasing the CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios. The method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CETP; cholesteryl-ester transfer protein; recombinant DNA antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration;
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                                                                                                              Sequence
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                                                                                                                                                                                                                                                                                                                           New recombinant DNA vaccines
                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-276984/23.
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1 LLLQMDFGFPKHLLVDFLQSLS
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                                                             Score 107;
Pred. No. 7
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Pred. No. 7.3e-11;
1; Mismatches 0;
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Maximum Match 100%
Listing first 45 summaries
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1: /SIDS1/gcgdal
2: /SIDS1/gcgdal
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21.518 Million cell updates/sec
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SUMMARIES

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ALIGNMENTS

RESULT Y13809

Y13809 standard; peptide; 22 AA.

08-JUL-1999

(first entry)

Y13809;

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CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; HDL; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration; pro-atherogenic dyslipoproteinaemia.
                                                                                                                                                                                                                                     Rabbit CETP immunogenic fragment.
                                                                                                                                                                       Oryctolagus sp.
                                                               Glenn K,
                                                                              (MONS ) MONSANTO CO.
                                                                                                  19-SEP-1997;
                                                                                                                   17-SEP-1998;
                                                                                                                                     01-APR-1999.
                                                                                                                                                       W09915655-A1.
                                            WPI; 1999-276984/23
         Example 1; Page 73; 99pp; English.
                           New recombinant DNA vaccines
                                                                Needleman P;
                                                                                                  97US-0934367
                                                                                                                     98WO-US19366
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CC uraemia, diabetes, Cushing's Syndrome, cachexias, eating disorders, AIDS, CC after stress and during neuromuscular disease.

XX
SQ Sequence 12 AA;

Query Match
Best Local Similarity 60.0%; Pred. No. 70;
Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 11 EHLLVDFLQS 20
Db 1 edllveflen 10

Search completed: December 21, 2000, 08:36:13

Job time: 472 sec
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RESULT
Y19320
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 apolipoprotein A-I (apoA-I) agonist (B) that is a peptide, or analog, which forms an amphipathic alpha-helix in presence of lipids. (A), optionally as a complex with lipids, and host cells that contain (A), are useful for gene therapy, or prevention, of diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atheroscierosis, restenosis, HDL (high density lipoprotein) and apoA-I deficiency, hypertrighting and metabolic syndrome, also to treat endotoxemia (septic shock). Host cells containing (A) can also be used to study the role of apoA-I in lipid metabolism. (B) can be used diagnostically, e.g. to measure serum HDL (particularly its subpopulation involved in retrograde cholesterol transport) and for imaging the circulatory system or HDL accumulations at fatty streaks. The present sequence represents a peptide from the present invention.
(apoA-I) which is a 15-29 residue peptide, or analog, that forms amphipathic alpha-helix in presence of lipids. (A), and their lip complexes, are used to treat or prevent diseases associated with
                                                                     Claim
                                                                                                                       WPI; 1999-277035/23
                                                                                                                                                                                                                                                                                                                                                                                                                                          human; lecithin:cholesterol acyltransferase; LCAT; hype:cholesterolaemia; cardiovascular disease; atherosclerosis; restenosis; HDL; apon I; high density lipoprotein; hypertriglyceridemia; metabolic syndrome;
                                        The present invention describes an agonist (A) of apolipoprotein
                                                                                              Peptide
                                                                                                                                                             Buttner K,
                                                                                                                                                                                                                             (CORN/)
(DASS/)
                                                                                                                                                                                                                                                                                                         28-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
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                                                                                                                                                                                                                                                      (BUTT/) BUTTNER K.
                                                                                                                                                                                                                                                                                                                                     08-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Apolipoprotein A-I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Y19320 standard;
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7; Conserv
                                                                                                                                                                                                                             CORNUT I.
                                                                                           agonists of apolipoprotein
                                                                                                                                                                                       SEKUL R.
                                                                                                                                                                                                              DUFOURCQ J
                                                                                                                                                                                                    METZ G.
                                                                    Page 157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22
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                                                                 280pp; English
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence is a polypeptide from the mammalian prolactin receptor. Sequences (Y32794-Y32823) are examples of polypeptide sequences found at or near the ubiquitin/proteosome complex binding site located on the intracellular part of a cell surface receptor. These sequences are used in a method for controlling the availability and signal transduction capability of a cell surface receptor by administering an inhibitor that is capable of inhibiting proteolytic cleavage of the receptor. Inhibition of this proteolytic cleavage results in the receptors being present on the surface for longer and therefore signalling for longer to the interior of the cell. This increases the sensitivity of cells to any hormones which might be present. The inhibitor is either derived from, competes with or binds to a polypeptide sequence of which sequences 122794-Y32823 are examples. The inhibitor may be used to treat muscle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. Y19188 to Y19441 represent lecithin cholesterol acyltransferase (LCAT) activity
                                                                                                                                                                                                                                                                                            Controlling the availability and/or signal transduction capability of a cell surface receptor, useful for treating growth hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Signal transduction; proteolytic cleavage proteosome binding site; muscle wasting;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atheroscierosis, restenosis, HDL (high density supportein) or apoa-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically
                                                                                                                                                                                                                                                Disclosure; Page 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oryctolagus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         growth
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diabetes; Cushing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to measure serum levels of HDL, in particular the HDL subpopulation that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11 EHLLVDFLQSLS
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                                                                                                                                                                                                                                                36pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    proteolytic cleavage; prolactin receptor; ite; muscle wasting; renal tubular defect; disease; eating disorder; AIDS; ubiquitin;
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58.3%;
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (apoÀ-I) which is a 15-29 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (METZ/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          is involved in retrograde cholesterol transport, also to image HDL at e.g. atherosclerotic streaks, and to raise antibodies. Y18934 to Y19187 represent lecithin:cholesterol acyltransferase (LCAT) activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 15-29 residue peptide, or analog, that forms an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example; Page 114; 254pp; English
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                                                                                                                                                                            08-APR-1999
                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                septic shock
                                                                                                                                                                                                                                                                                       Apolipoprotein A-I; agonist; dyslipidemic disorder; dyslipidemia; human; lecithin:cholesterol acyltransferase; LCAT; hypercholesterolaemia; cardiovascular disease; atherosclerosis; restenosis; HDL; apoA-I;
                                                                                                                                                                                                                                                                                                                                                                 09-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                          Y18812
                                                                                                                                                                                                                                                                                                                                                                                                                Y18812 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide agonists of apolipoprotein
   WPI; 1999-277031/23
                           Buttner K,
                                                                (CORN/)
(DASS/)
(METZ/)
                                                                                                                                                   28-SEP-1998;
                                                                                                                                                                                                    WO9916408-A2
                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                          Lecithin:cholesterol
                                                                                                                            29-SEP-1997;
                                                                                                     (BUTT/) BUTTNER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 EHLLVDFLQSLS 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7
                                                                                                                                                                                                                                                                          density lipoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             erlledllgaln 18
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                                                  CORNUT I.
DASSEUX J.
METZ G.
SEKUL R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  core peptides, which are apoA-I agonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cornut I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₹ G.
₹ R.
                         Cornut I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                            97US-0940093
                                                                                                                                                    98WO-US20328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28.8%;
                                                                                                                                                                                                                                                                                                                                        acyltransferase activation exhibiting
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                            Dasseux
                                                                                                                                                                                                                                                                            hypertriglyceridemia; metabolic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                  22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 32; DB Pred. No. 94; 2; Mismatches
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                            'n
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                            Metz
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                                                                                                                                                                                                                                                                                                                                          peptide #133.
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Y18549
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Best Local S
Matches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complexes, are used to treat or prevent diseases associated with dyslipidemia, specifically hypercholesterolaemia, cardiovascular disease, atherosclerosis, restenosis, HDL (high density lipoprotein) or apoA-I deficiency; hypertriglyceridemia and metabolic syndrome, also for treating septic shock. When labeled, (A) can also be used diagnostically to measure serum levels of HDL, in particular the HDL subpopulation that is involved in retrograde cholesterol transport, also to image HDL at
                                                                                                                                                                                                                                                                                                                                                                            Gene therapy; apolipoprotein A-I; agonist; dyslipidemic disorder; ApoA-I; cardiovascular disease; atherosclerosis; restenosis; LCAT; hyperlipidemia; septic shock; lecithin:cholesterol acyltransferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 e.g. atherosclerotic streaks, and to raise antibodies. Y18680 represent lecithin:cholesterol acyltransferase (LCAT) activity exhibiting core peptides, which are apoA-I agonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes an agonist (A) of apolipoprotein A-I (apoA-I) which is a 14-22 residue peptide, or analog, that forms an amphipathic alpha-helix in presence of lipids. (A), and their lipid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Y18549 standard; Peptide; 22
                         Claim 18; Page 166; 232pp; English.
                                                                                                                                                                                                                                                                                      08-APR-1999
                                                                                                                                                                                                                                                                                                                W09916409-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                Lecithin: cholesterol acyltransferase activation exhibiting peptide #133.
The present invention describes a nucleic
                                                   Nucleic acid encoding apolipoprotein
                                                                             WPI; 1999-254921/21
                                                                                                        Sekul
                                                                                                                  Buttner K,
                                                                                                                                                                               (BUTT/) BUTTNER K. (CORN/) CORNUT I. (DASS/) DASSEUX J.
                                                                                                                                                                                                                                    29-SEP-1997;
                                                                                                                                                                                                                                                            28-SEP-1998;
                                                                                                                                                                                                                                                                                                                                           HOMO
                                                                                                                                                                   (DUFO/)
                                                                                                                                            SEKU/)
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                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                  CORNUT I.
DASSEUX J.
DUFOURCQ J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 7; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agonists of apolipoprotein
                                                                                                                                            SEKUL R.
                                                                                                                                                        METZ G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22 AA;
                                                                                                                  Cornut I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                    97US-0940136
                                                                                                                                                                                                                                                              98WO-US20329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28.8%;
                                                                                                                    Dasseux J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 32; DB Pred. No. 94; 2; Mismatches
                                                                                                                    Dufourcq J,
                                                    A-I
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94;
                                                    agonist
  acid
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  (A) encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                     Metz G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22;
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 61.9
Matches 8; Conservative
                                                                                                                                                                                           microbial surface components recognising adhesive matrix molecule; MSCRAMM; fibronectin; fibronectin-binding protein; antibody; epito antibiotic; bacterial infection; antibiotic·resistant strain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This sequence represents a secreted human protein encoded by the gene clone detailed in the descriptor line. The gene can be used to generate fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. X84924) for increasing the stability of the fused protein as compared to the human protein only.

The invention relates to 125 novel genes and their fragments (nucleic acid sequences: X84933-X85057; amino acid sequences Y27567-Y27933) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polypeutides in a sample or by determining the presence of mutations in the new polynucleotides, based or which tissues they are most highly expressed in a convenience of according to the presence of mutations in the new polynucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-NOV-1997;
17-NOV-1997;
17-NOV-1997;
         (TEXA ) UNIV TEXAS A & M SYSTEM
                                       21-JAN-1997;
                                                                                                23-JUL-1998
                                                                                                                            WO9831389-A2
                                                                                                                                                        Staphylococcus
                                                                                                                                                                                                                                                                                                                                            W65690 standard; peptide; 21 AA
                                                                    21-JAN-1998;
                                                                                                                                                                                                                                                        Fibronectin binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This sequence represents a secreted human pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Carter KC, Ebner R, Endress GA, Feng P, Janat
Kyaw H, Lafleur DW, Moore PA, Ni J, Olsen HS,
Ruben SM, Shi Y, Soppet DR, Wei Y;
                                                                                                                                                                                                                                                                                      16-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New human secreted proteins and coding sequences useful for treating disorders of the immune system and hyperproliferative disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-337740/28
N-PSDB; X85016.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           which tissues they are most highly expressed in (see x81933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                            10
                                                                                                                                                                                                                                                                                                                                                                                                                                                10 PEHLLVDFLQSLS 22'
                                                                                                                                                                                                                                                                                                                                                                                                                  1 phssrvsflqsls 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 119; 507pp; English.
                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97US-0066090.
97US-0066094.
97US-0066095.
97US-0066089.
                                      97us-0036139
                                                                   98WO-US01222
                                                                                                                                                      aureus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29.7%;
                                                                                                                                                                                                                                                     protein-derived peptide #34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 33;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB . 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
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                                                                                                                                                                                                          epitope;
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                                                                                                                     fibronectin-binding protein that do not bind to fibronectin. (2) fusion
C protein containing at least one peptide of a fibronectin-binding protein
C linked to a second amino acid sequence; (3) nucleic acid encoding
C the isolated peptide of (1). Antibodies, the isolated peptides of
C (1) and the nucleic acids are all useful for immunisation (active or
CC passive) and (by inhibiting binding of bacteria to fibronectin) for
CC preventing or treating infection in humans or other animals, particularly
CC by staphylococci or streptococci, e.g. meningitis, otitis media,
CC pneumonia, endocarditis, mastitis in cattle, abortion in horses and many
CC others. Since the antibodies block binding of bacteria, they should be
CC effective against antibiotic-resistant strains, and may replace
CC antibiotic therapy or increase its effectiveness. Sequences W65670-90
CC represent a series of synthetic peptides based on the D3 repeat of
CC a proline residue at each position throught the sequence (ie a proline
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to antibodies that bind to a fibronectin-binding domain of a fibronectin-binding protein, and inhibit binding of the protein to fibronectin. Also claimed are: (1) isolated peptides of a protein to fibronectin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 8; Page 101; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      binding to fibronectin - used to treat or prevent bacte infection, especially by Staphylococci and Streptococci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antibody that binds to fibronectin-binding binding to fibronectin - used to treat or p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1998-413816/35
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Speziale P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                House-pompeo KL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Joh D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcgavin MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein, preventing prevent bacterial
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RESULT
Y19066
                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local (
                                                                                                                        human; lecithin:cholesterol acyltransferase; cardiovascular disease; atherosclerosis; res high density lipoprotein; hypertriglyceridem
                                                                                                                                                     Apolipoprotein A-I; agonist; dyslipidemic disorder;
                                                                                           Synthetic
                                                                                                                                                                                                                                                                         Y19066 standard; Peptide;
28-SEP-1998;
                                                   WO9916458-A1
                                                                                                                 septic shock
                                                                                                                                                                                             Lecithin:cholesterol
                                                                                                                                                                                                                         09-JUL-1999
                                                                                                                                                                                                                                                   Y19066;
                                                                            domo sapiens
                                                                                                                                                                                                                                                                                                       11
                                                                                                                                                                                                                                                                                                                                            4 yqfpphnsvdf 14
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                                                                                                                                                                                                                                                                                                                                                                                               Similarity 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                      17
                                                                                                                                                                                         acyltransferase activation exhibiting peptide #133.
                                                                                                                                                                                                                                                                                                                                                                                                             28.8%;
54.5%;
                                                                                                                                                                                                                                                                           22
                                                                                                                                                                                                                                                                                                                                                                                            Score 32; DB Pred. No. 90; 1; Mismatches
                                                                                                                                                                                                                                                                           B
                                                                                                                                         restenosis; HDL; apcA-I;
                                                                                                                                                                                                                                                                                                                                                                                                                        19;
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                                                                                                                                                                                                                                                                                                                                                                                                                     Length 21;
                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                dyslipidemia;
                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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(BUTT/) BUTTNER K. (CORN/) CORNUT I. (DASS/) DASSEUX J.

29-SEP-1997;

97US-0940096 98WO-US20326

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RESULT
P80053
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Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The inventors claim a multiclass hybrid interferon polypeptide and a DNA unit having a nucleotide sequence which encodes it. Pref. the AA sequence consists of alpha and beta interferons. Pref. IF1 is (i) the 1-73 AA seq. of HuIFN-alpha-1 (and IF2 is the 74-166 AA seq. of HuIFN-beta-1) (see N30155, P30222); or (ii) the 1-41 AA seq. of HuIFN-beta-1) (see N30160, P30227). Alternativeley IF1 is the amino terminal end of a beta-IF and IF2 is the carboxy terminal of an alpha-IF (esp. the 1-73 seq. of HuIFN-beta-1 and the 74-167 seq. of HuIFN-alpha-1 resp.) (see N30156, P30223). In the seq. of HuIFN-alpha-1 (and IF2 is the carboxy terminal of an alpha-IF (esp. the 1-73 seq. of HuIFN-beta-1 and the 74-167 seq. of HuIFN-alpha-1 resp.) (see N30156, P30223). In the sex manyles plasmids pGW5 and pDM101/trp/beta-1 and p-alpha-61A were used (see N30151, N30152, N30157). HinfI was used to digest the DNA sequences in the region of significant handicaps (see N30153, N30154, N30159), and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Multi:class hybrid interferon poly:peptide(s) - antiviral and cell growth regulatory activities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-PSDB; N30158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1983-723186/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mark DF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example;
                                                                                                                                                                                                                                                                                                                        antitumour;
                                                                                                                                                                                                                                                                                                                                  Alpha-beta hybrid interferon; multi-class hybrid interferon;
                                                                                                                                                                                                                                                                                                                                                            Sequence of
                                                                                                                                                                                                                                                                                                                                                                                       17-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                         P80053 standard; protein; 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                    19-JUL-1988
                                                                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                P80053;
Multi-class hybrid interferon polypeptide(s)
                                      WPI; 1988-219882/31
                                                                 Mark DF,
                                                                                                                    15-JUL-1985;
19-JAN-1983;
                                                                                                                                                           15-JUL-1985;
                                                                                                                                                                                                                US4758428-A
                                                                                        (CETU ) CETUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 DEGFPE 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dfgfpq 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        restriction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fig 17; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Creasey AA;
                                                               Creasey AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12
                                                                                                                                                                                                                                                                                                                       antiviral;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                              human
                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                          CORP.
                                                                                                                   85US-0755265
83CA-0419758
                                                                                                                                                           85US-0755265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fragments were ligated to form hybrid DNA.
                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                          /note="Residue 40"
                                                                                                                                                                                                                                                                                                                                                              interferon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29.7%;
                                                                                                                                                                                                                                                                                                                       therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 33; DB Pred. No. 34; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                              (huIFN) alpha-61A gene around AA 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                with restricted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
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the DNA fragment encoding the 23 AA signal polypeptide of preinterieron with a 120BP ECORI/Sau3A promoter fragment E.coli trp promoter, operator, and trp leader ribosome binding site preceperator, encoding an ATG initiation codon and using HindIII site that was inserted, 59 nucleotides 3'-end of the TGA translational stop codon, to insert the gene into the plasmid pBWII (a deriv of pBR322 having a deletion between the HindIII and PWUII sites). The complete DNA sequence of the promoter and gene fragments inserted between the EcoRI and HindIII sites of pBWII is shown in n80049. The hybrid gene was constructed by taking advantage of the homologies between hulfN alpha-61A & hulfN beta-1 at around AA 40 of both proteins. The DNA sequence 5'-proximal to the DdeI restriction enzyme cutting site of the hulfN alpha-61A DNA is ligated to the DNA sequence 3'-proximal to the site of hulfN beta-1, to create a fusion of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                of 2 distinct subsequences are claimed. The plasmids used in the construction of huIFN-alpha-61A-beta-1 hybrid are plasmids palpha61A and pDM101/trp/beta-1. Assembly of the palpha61A plasmid invovled replacing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Multi-class hybrid IFN polypeptides having an AA sequence of 2 distinct subsequences are claimed. The plasmids used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 having sequence from interferon-alpha-1 and sequence interferon-beta-1 for restricted activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example; Fig 17; 24pp;
                                                  genes while preserving the translational reading frame of both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            composed
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RESULT
Y27814
                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                             Matches
Human secreted
                    30-JUL-1999
                                          Y27814;
                                                              Y27814 standard; Protein; 14 AA.
                                                                                                                  2 dfgfpq 7
                                                                                                                                        6 DFGFPE 11
                                                                                    9
                                                                                                                                                            Similarity 5; Conserv
                                                                                                                                                             Conservative
                    (first entry)
protein encoded by gene No.
                                                                                                                                                                         29.7%;
83.3%;

    Mismatches

                                                                                                                                                                         Score 33; DB
Pred. No. 34;
  84
                                                                                                                                                              0;
                                                                                                                                                                Indels
                                                                                                                                                                0;
                                                                                                                                                                Gaps
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Дb Qy

Sequence

12 AA;

Score

9;

Length 12;

0;

ID

Human; secreted protein; fusion protein; gene therapy; protein therapy; diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS; cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion; endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.

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17-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
                                                             04-NOV-1998;
                                                                                              Homo sapiens
                                                                       20-MAY-1999
                                                                                   WO9924836-A1
97US-0064900.

97US-0064911.

97US-0064911.

97US-0064912.

97US-0064983.

97US-0064985.

97US-0064985.

97US-0064988.
                                                             98WO-US23435
                                                  97US-0066100
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CC somatostatin and a Th epitope. Somatostatin immunogens may be used Ct to promote growth in livestock. Y91208 is a human CDA CDR2-like domain CC antigenic site, and Y91209-Y90211 are MVH The pitope/CD4 CDR2 CC antigenic peptides which may be used to prevent HIV infection of T CC cells. Y90212 is a modified version of a human IgE (immunoglobulin CE) CH3 domain, and Y90213-Y90219 are Th epitope/CD4 CH3 antigenic CC peptides which may be used in the treatment of allergies. Y91220 is CC a peptide derived from foot and mouth disease virus (FMDV) VP1 capsid CC protein and Y91221-Y91222 comprise this peptide and a Th epitope. Y91223 is a Plasmodium falciparum circumsporozoite (CS) target antigen and CC Y91224-Y91225 comprise the CS antigen and an MVF Th epitope and may be used in a malaria vaccine. Y91231 represent CETP-derived peptides comprise the CS antigen and an MVF Th epitope and may be comprise the CS antigen and an Arteriosclerosis and CC epitope which may be used to prevent or treat arteriosclerosis and CC epitope which may be used to prevent or treat arteriosclerosis and CC epitopes, and Y91248-Y91251 and Y91258-Y91273 are HIV-1 neutralising CC B-cell epitopes, and Y91248-Y91251 and Y91258-Y91273 are antigenic as component in an anti-HIV-1 vaccine. Y91198 and Y91199 are respectively captides comprises the few hich may be used as a component in an anti-HIV-1 was in protein epitope which may be used as a component in an anti-HIV-1 was in protein epitope from Yersinia species, and CC antigenic peptides, both of which may optionally be used in the CC antigenic peptides, both of which may optionally be used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
Oryctolagus cuniculus Homo sapiens.
                                                                                    Immune response; high density lipoprotein; HDL; cholesterol; human; serum; epitope; cholesteryl ester transfer protein; CETP; rabbit.
                                                                                                                                                                              Human/Rabbit CETP common peptide.
                                                                                                                                                                                                                                                                                                                                                                   W24294 standard; peptide; 11 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                               17-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hinge spacer peptide, both of which antigenic peptides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunoreactive self-antigen or tumour antigen. The Th epitopes an peptide immunogens may be used for prevention and/or treatment of infections (HIV, foot-and-mouth disease or malaria); for cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein (CETP) or HIV epitopes,
immunoreactive self-antigen or t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                71.2%;
93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 79; DB 21; Pred. No. 3.5e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    but more generally against any pathogen, tumour antigen. The Th epitopes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 21; Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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P30225
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                                                                                                                                 PN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                      19-JAN-1982;
03-FEB-1983;
15-JUL-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention to stimulate an immune response to increase high density lipoprotein (HDL) cholesterol in a mammal exhibiting low levels of serum HDL. These peptides represent immunogenic epitopes of cholesteryl ester transfer protein (CETP). The method utilises the body's own immune system to lower CETP levels, thereby increasing the level of beneficial HDL cholesterol, preferably in serum. The method avoids the problems associated with the repeated administration of drugs which have undesirable side effects. This peptide represents a region of CETP which is common to both human and rabbit proteins.
                                                                                                                                                                                                                                         Hybrid interferon;
                                                                                                                                                                                                                                                                                                                          P30225;
                                                                                                                                                                                                                                                                                                                                                  P30225 standard; Protein; 12 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stimulating an immune response to increase high density lipoprotein - avoids repeated administration of toxic drugs to lower cholesteryl ester transfer protein levels
(CETU-) CETUS CORP
                                                                                                       21-JUL-1983
                                                                                                                                 W08302461-A
                                                                                                                                                                        Misc-difference
                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                Sequence of interferon (HuIFN) -alpha-61A around amino acid
                                                                                                                                                                                                                                                                                               25-MAY-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 5; Page 16; 26pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Brostoff SW, Carlo DJ,
                                                                             18-JAN-1983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequences given in W24292-94 were used in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (IMMU-) IMMUNE RESPONSE CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9639168-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                               12 HLLVDFLQSLS 22
                                                                                                                                                                                                                                                                                                                                                                                                                    1 hllvdflqsls 11
                                                                                                                                                                                                                                                                                                                                                                               7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                             (first entry)
                        82US-0340782.
83US-0463574.
85US-0755265.
                                                                            83WO-0900607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95US-0482454.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96WO-US09143
                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                          /label= AA No. 40
                                                                                                                                                                                                                                    antiviral; therapy; cancer; tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     47.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kwoh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 53;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              D۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 18; Length 11; 0.025;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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Y91229

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infections (HIV, foot-and-mouth disease or malaria), for cancer immunotherapy; for inhibition of the action of luteinising hormone releasing hormone (LHRH) for contraception, treatment of hormone releasing hormone (LHRH) for contraception, treatment of hormone dependent cancer, prevention of boar taint in meat, and immunocastration); for promoting the growth of animals; or for immunocastration); for promoting the growth of animals; or for treating allergies or arteriosclerosis. Incorporation of a promiscuous Th (functional in genetically diverse subjects) into an immunogen improves capacity to induce a strong Thelper cell-mediated immune response, resulting in production of antibodies against a target antigen. The can replace carrier proteins and pathogen-derived Thelper repitopes. Sequence Y91121 represents a promiscuous Thelper epitope from the measless virus F (MVF) protein and sequences Y91122-Y91142, Y91226 and Y91245-Y91246 represent synthetic Thepitopes based on the MVF The phototics against a firm and sequences Y9114. V91156 and Y91245-Y91246 are presents a promiscuous Thepitope from the measless of the firm of the promiscuous of the most of the firm of the promiscuous of the most of the mos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope; lutelnising hormone releasing hormone; LHRH; contraceptive; anticancer; sommatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMDV; foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; plasmodium falciparum; circumsporozoite; antimalarial; CETP; cholesteryl ester transport protein; anti-arteriosclerotic.
hepatitis B virus (HBV) surface antigen, and sequences 79114-791155 ar synthetic epitopes derived from this HBV epitope. 79116-791196, 791227 and 791242-791244 are antigenic peptides comprising an LHRH sequence joined to a promiscuous Th epitope. 791197 is the LHRH target antigenic peptide used in these LHRH antigenic peptides. 791200 is somatostatin, and 791201-791207 are antigenic peptides comprising somatostatin and a Th epitope. Somatostatin immunogens may be used to promote growth in livestock. 791208 is a human CD4 CDR2-like domain antigenic peptides which may be used to prevent HIV infection of T cells. 790212 is a modified version of a human 10g6 (immunoglobulin E) CH3 domain, and 790213-790219 are Th epitope/IgE CH3 antigenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antigenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9966957-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human cholesteryl transport protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Y91229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein (CETP) or HIV epitopes, but more generally against any pathogen, immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 10; Page 50; 129pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-160564/14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UNBI-) UNITED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immune deficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      T-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0100412.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US13975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptides comprising the Th epitopes of the invention
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a peptide derived from foot and mouth disease virus (FMDV) VP1 capsid protein and Y91221-Y91222 comprise this peptide and a Th epitope. Y91223 is a Plasmodium falciparum circumsporozoite (CS) target antigen, and Y91224-Y91225 comprise the CS antigen and an MVF Th epitope and may be used in a malaria vaccine. Y91228-Y91231 represent CETP-derived peptides and Y91232-Y91241 are immunogens comprising a CETP peptide and a Th epitope which may be used to prevent or treat arteriosclerosis and cardiovascular disease. Y91247 and Y91252-Y91257 are HTV-1 neutralising B-cell epitopes, and Y91248-Y91251 and Y91258-Y91273 are antigenic peptides comprising MVH Th and HTV-1 B-cell epitope which may be used as a component in an anti-HTV-1 vaccine. Y91198 and Y91199 are respectively an immunostimulatory invasin protein epitope from Yersinia species, and hinge spacer peptide, both of which may optionally be used in the
                                                                                                                                                                                                                                                                                                                                                                                                        somatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMDV; foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; Plasmodium falciparum; circumsporozoite; antimalarial; CETP; cholesteryl ester transport profess.
                                                                                                                                                                           WPI; 2000-160564/14
                                                                                                                                                                                                    Wang
                                                                                                                                                                                                                                                                                                                     29-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human cholesteryl transport protein (CETP) peptide,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptides which may be used in the treatment of allergies.
                                                                                                                                                                                                                                                             20-JUN-1998;
                                                                                                                                                                                                                                                                                          21-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Y91230 standard;
                                                                                                                                                                                                                                 (UNBI-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hepatitis B virus surface antigen; HBV; immunogenic; B-cell
luteinising hormone releasing hormone; LHRH; contraceptive;
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16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T-cell epitope; measles virus
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                                                                                                                                                                                                                                  BIOMEDICAL INC
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Pred. No. 8.5e-07;
0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID
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B-cell epitope;
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The invention relates to novel promiscuous T helper cell epit and immunogenic peptides comprising the Th epitopes of the in along with B cell epitopes. The Th epitopes and peptide immu containing them, are used to induce a T helper cell response specifically against Plasmodium falciparum, cholesteryl este

cholesteryl ester transport

lper cell epitopes opes of the invention peptide immunogens

invention

(Th),

New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis or human immune deficiency virus -

Claim

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Page

62; 129pp; English.

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RESULT
Y13821
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Best Local :
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This sequence represents an immunogenic fragment of the human cholesteryl ester transferase protein (CETP).

The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles and for increasing the GETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios. The method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; HDL; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesterol concentration of a mammal whose blood also contains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios. The method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New recombinant DNA vaccines
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Pred. No. 5.6e-11;
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Best Local :
                                                                                                                                           cholesteryl ester transferase protein (CETP).

The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesterol concentration of a mammal whose blood also contains CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios. The method can have an effect that lasts for months as compared to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CETP; cholesteryl-ester transfer protein; recombinant DNA antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration;
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                                                                                                           Sequence
                                                                                                                                                                                                                                                                       This sequence represents an immunogenic fragment of the rabbit
                                                                                                                                                                                                                                                                                               Example 1; Page 73; 99pp; English.
                                                                                                                                                                                                                                                                                                                          New recombinant DNA vaccines
                                                                                                                                                                                                                                                                                                                                                                            Glenn
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                                                                                                                                     short-term
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                                                                                                                                   effects of the small molecule drugs now available
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                                                          96.48;
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Listing first 45 summaries
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Perfect score:
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/SIDS1/gcgdata/geneseq/geneseqp/AA1980.DAT:*
SIDS1/gcgdata/geneseq/geneseqp/AA1981.DAT:*
SIDS1/gcgdata/geneseq/geneseqp/AA1982.DAT:*
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Gapop 10.0 , Gapext 0.5
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111
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     December 21, 2000, 08:36:13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version Copyright (c) 1993 - 2000
                 //SIDS1/gcgdata/geneseq/geneseqp/AA1986.DAT: *
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/SIDS1/gcgdata/geneseq/geneseqp/AA2000.DAT:*
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Compugen Ltd
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21.518 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

12	11	10	9	æ	7	6	ъ	4	ω	N	_	Result No.
32	32	32	33	33	ω ω	53	79	83	107	111	111	Score
28.8	28.8	28.8	29.7	29.7	29.7	47.7	71.2	74.8	96.4	100.0	100.0	Query Match I
22	22	21	14	12	12	11	16	16	22	٠٠	22	Query Match Length DB
20	20	19	20	Ø	4	18	21	21	20	20	20	; ₩
Y18812	Y19066	W65690	Y27814	P80053	P30225	W24294	Y91230	Y91229	Y13809	Y13821	Y13815	ij
Lecithin:cholester	Lecithin: cholester	Fibronectin bindin	Human secreted pro	Sequence of human	Sequence of interf	Human/Rabbit CETP	Human cholesteryl	Human cholesteryl	Rabbit CETP immuno	Human CETP immunog	Rabbit CETP immuno	Description

Disclosure; Page 75; 99pp; English.

ALIGNMENTS

RESULT

CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; HDL; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration; 08-JUL-1999 Oryctolagus sp. Y13815 standard; peptide; 22 AA. 17-SEP-1998; 01-APR-1999 pro-atherogenic dyslipoproteinaemia Rabbit CETP immunogenic fragment. WPI; 1999-276984/23. WO9915655-Al. New recombinant DNA vaccines (MONS) MONSANTO CO. 19-SEP-1997; ~ Needleman (first entry) 97US-0934367 98WO-US19366 ď

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Query Match
Best Local Similarity
"herhes 8; Conserv:
                                                                                                                         This sequence represents a secreted human protein encoded by the gene clone detailed in the descriptor line. The gene can be used to generate fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. X84924) for increasing the stability of the fused protein as compared to the human protein only.

The invention relates to 125 novel genes and their fragments (nucleic acid sequences: X84933-X85057; amino acid sequences Y27567-Y27933) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polypucleosin a sample or by determining the presence of mutations in the new polynucleotides. Specific uses are described for each of the 125 polynucleotides, based on usea).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
17-NOV-1997;
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17-NOV-1997;
17-NOV-1997;
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07-NOV-1997;
07-NOV-1997;
                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Carter KC, Ebner R,
Kyaw H, Lafleur DW,
Ruben SM, Shi Y, So
                                                                                                                                                                                                                                                                                                                                                                                    New human secreted proteins and coding sequences useful for treating disorders of the immune system and hyperproliferative disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-337740/28.
                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 119; 507pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB; X85016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
                         14 PEHLLVDFLQSLS 26
phssrvsflqsls 13
                                                                                                                         14 AA;
                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97US-0066090.
97US-0066094.
97US-0066095.
97US-0066089.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0064908
97US-0064911
97US-0064912
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97US-0064900
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                                                                24.6%;
61.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R, Endress GA, Feng P, Janat F;
W, Moore PA, Ni J, Olsen HS, Rosen CA;
Soppet DR, Wei Y;
                                                                Score 33; DB
Pred. No. 52;
                                                     Mismatches
                                                                             20; Length 14;
                                                     5
                                                     Indels
                                                  0;
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Search completed: December 21, Job time: 150 sec

2000, 08:38:46

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RESULT
P80053
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Thehes 5; Conserve
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03-FEB-1983;
15-JUL-1985;
                                                                                                                                                                                                                                                                                                                                                                                             The inventors claim a multiclass hybrid interferon polypeptide and a DNA unit having a nucleotide sequence which encodes it. Pref. the AA sequence consists of alpha and beta interferons. Pref. IF1 is (1) the 1-73 AA seq. of HuIFN-alpha-1 (and IF2 is the 74-166 AA seq. of HuIFN-beta-1) (see N30155, P30222); or (ii) the 1-41 AA seq. of HuIFN-beta-1) (see N30156, P30222); or (ii) the 1-41 AA seq. of HuIFN-beta-1) (see N30160, P30227). Alternativeley IF1 is the amino terminal end of a beta-IF and IF2 is the carboxy terminal of an alpha-IF (sep. the 1-73 seq. of HuIFN-beta-1 and the 74-167 seq. of HuIFN-alpha-1 resp.) (see N30156, P30223). In the seq. of HuIFN-alpha-1 pDM101/trp/beta-1 and p-alpha-61A were used (see N30151, N30152, N30157). HinfI was used to digest the DNA sequences in the region of significant handicaps (see N30151, N30159), and
Key
                                                  Alpha-beta hybrid interferon; multi-class hybrid interferon; antitumour; antiviral; therapy.
                                                                                       Sequence of human interferon (huIFN) alpha-61A gene around
                                                                                                                                               P80053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \begin{tabular}{ll} {\tt Multi:class hybrid interferon poly:peptide(s) - with restricted} \\ {\tt antiviral and cell growth regulatory activities} \end{tabular}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mark DF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ното
                          Homo
                                                                                                                    17-NOV-1990
                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1983-723186/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-JAN-1983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-JUL-1983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO8302461-A
                                                                                                                                                                    P80053 standard; protein; 12 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CETU-) CETUS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                      the restriction fragments were ligated to form hybrid DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hybrid interferon; antiviral; therapy; cancer; tumour.
                                                                                                                                                                                                                                                                10 DEGFPE 15
                                                                                                                                                                                                  14
                                                                                                                                                                                                                                     2 dfgfpg 7
                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N30158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fig 17; 61pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Creasey AA
                                                                                                                                                                                                                                                                                                                                                             12 AA;
                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85US-0755265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82US-0340782
83US-0463574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83WO-0900607
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= AA No. 40
                                                                                                                                                                                                                                                                                                         24.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        English.
                                                                                                                                                                                                                                                                                            ۲,
                                                                                                                                                                                                                                                                                                         Score 33; DE
Pred. No. 44;
                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                    DΒ
                                                                                                                                                                                                                                                                                                                     4.
                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                    Length 12
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PR
PR
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the DNA fragment encoding the 23 AA signal polypeptide of preinterferon with a 120BP EcoRI/Sau3A promoter fragment E.coli trp promoter, operator, and trp leader ribosome binding site preceoperator, encoding an ATG initiation codon and using HindiII site that was inserted. 59 nucleotides 3'-end of the TGA translational stop codon, to insert the gene into the plasmid pBW11 (a deriv of pBR322 having a deletion between the HindiII and PVUII sites). The complete DNA sequence of the promoter and gene fragments inserted between the EcoRI and HindIII sites of pBW11 is shown in n80049. The hybrid gene was constructed by taking advantage of the homologies between huIFN alpha-61A & huIFN beta-1 at around AA 40 of both proteins. The DNA sequence 5'-proximal to the DNA sequence acutting site of the huIFN alpha-61A DNA is ligated to the DNA sequence cutting site of the huIFN alpha-61A DNA is ligated to the DNA sequence
                                                                                                                                                                                                                                                                                               Multi-class hybrid IFN polypeptides having an AA sequence composed of 2 distinct subsequences are claimed. The plasmids used in the construction of huIFN-alpha-61A-beta-1 hybrid are plasmids palpha61A and pDM101/trp/beta-1. Assembly of the palpha61A plasmid invovled replacing
Sequence
                                                                                                                                                                                                                                                                                                                                                                                               Example; Fig 17; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Multi-class hybrid interferon polypeptide(s) having sequence from interferon-alpha-1 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1988-219882/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JUL-1985;
19-JAN-1983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mark DF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CETU ) CETUS CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US4758428-A
                                                                                                                                                                                                                                                                                                                                                                                                                                      interferon-beta-1 for restricted activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JUL-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Creasey AA
                                   while preserving
 12 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85US-0755265
83CA-0419758
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                                 the translational reading frame
                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence
                                   of both
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Query Match
Best Local
                                                  Matches
                                  10 DFGFPE 15
15
                    ||||||:
| dfgfpq 7
                                                 Similarity
5; Conser
                                                 Conservative
                                                        24.6%;
                                                        Score 33;
Pred. No.
                                                       DB 9;
44;
                                                 0
                                                               Length 12;
                                                 Indels
                                                 0
                                                 Gaps
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В δõ

Y27814 standard; Protein; 14 AA

Y27814;

30-JUL-1999 (first entry)

Human secreted protein encoded by gene No. 84

Human; secreted protein; fusion protein; gene therapy; protein therapy; diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS; cognitive disorder; schizophrenia; prostate; obesity; osteoporosis; arthritis; testis; lung; thyroiditis; th thyroid; osteoclast; thymus; digestion;

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11

26

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RESULT
W24294
ID W2
                                                                            RESULT
Y12067
XXAXXXX
                                                                                                                          밁
                                                                                                                                              Qγ
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                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                            The sequences given in W24292-94 were used in the method of the invention to stimulate an immune response to increase high density lipoprotein (HDL) cholesterol in a mammal exhibiting low levels of serum HDL. These peptides represent immunogenic epitopes of cholesteryl ester transfer protein (CETP). The method utilises the body's own immune system to lower CETP levels, thereby increasing
                                                                                                                                                                                                                                                            the level of beneficial HDL cholesterol, preferably in serum. The method avoids the problems associated with the repeated administration of drugs which have undesirable side effects. This peptide represents
                                                                                                                                                                                                                                                                                                                                                                                                     Stimulating an immune response to increase high density lipoprotein - avoids repeated administration of toxic drugs to lower cholesteryl ester transfer protein levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immune
serum;
                      18-JUN-1999
                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W24294;
                                            Y12067;
                                                                  Y12067 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                              Claim 5; Page 16; 26pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Brostoff SW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (IMMU-) IMMUNE RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9639168-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oryctolagus cuniculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human/Rabbit CETP common peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-OCT-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W24294 standard; peptide;
                                                                                         12
                                                                                                                                                16 HLLVDFLQSLS
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                                                                                                                         1997-042849/04.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               response; epitope;
                                                                                                                                                                                                                                                    of CETP which is common to both human and rabbit proteins.
                                                                                                                                                                                                                              11 AA;
                                                                                                                                                                      Conservative
                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carlo DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95US-0482454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96WO-US09143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cholesteryl ester
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            high density lipoprotein; HDL; cholesterol; huma cholesteryl ester transfer protein; CETP; rabbit.
                                                                                                                                                                                 39.6%;
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                                                                                                                                                                       0;
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Pred. No.
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                                                                                                                                                                                           Length 11
                                                                                                                                                                       Indels
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Sequence of interferon (HuIFN) -alpha-61A around

amino

acid 40

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P30225
ID P3
XX
AC P3
AC P3
XX
DT 25
XX
XX
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                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                           secreted proteins, and encode the proteins given in Y01602 and Y11994 to Y12760, respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. They can also be used to develop products for diagnosis and therapy. They can also be used to develop products for diagnosis and therapy. They can also be used to develop products for diagnosis and therapy. They can also be used for cytokine activity, cell cregulating activity, tissue growth regulating activity, reproductive hormone regulating activity, themotactic/chemokinetic activity, haemactory activity, tumour inhibition activity or other activities. The products activity, tumour inhibition activity or other activities. The products activity tumour inhibition activity and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into
                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleic acids encoding human secreted proteins - obtained from cDNA libraries prepared from kidney, fetal kidney, dystrophic muscle, muscle and heart tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation;
                                                                                                                      P30225 standard;
                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           x40826 to X41093 represent 5' expressed sequence tags (ESTs) for human secreted proteins, and encode the proteins given in Y01602 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 34; Page 500-501; 622pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Duclert A, Dumas Milne Edwards
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-AUG-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-FEB-1999
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                                                    25-MAY-1992
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                                                                                                                                                                                                          mgggiaesflcnflvsls 18
                                                                                                                                                                                                                                             MDFGFPEHLLVDFLQSLS 26
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                                                                                                                                                                                                                                                                             Similarity
9; Conserv
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                                                                                                                                                                                                                                                                               Conservative
                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hormone regulation; chemotactic; chemo; anti-inflammatory; tumour inhibition.
                                                                                                                                                                                                                                                                                                                                                                 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-IB01238
                                                                                                                    Protein; 12
                                                                                                                                                                                                                                                                                             25.4%;
50.0%;
                                                                                                                                                                                                                                                                           Score 34; DB
Pred. No. 69;
1; Mismatches
                                                                                                                        ĀΑ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chemotactic; chemokinetic; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lacroix
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                                                                                                                                                                                                                                                                                                             Length 25;
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market and

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Y91230
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC v91227 and v91242 verified to be prices verified to a promiscuous The pittope. y91197 is the LIRH target cantigenic peptide used in these LHRH antigenic peptides. v91200 is comatostatin, and v91201-v91207 are antigenic peptides comprising an LHRH committee of the peptides comprised to antigenic statin and a Thepitope. Somatostatin immunogens may be used to promote growth in livestock. v91208 is a human CD4 CDR2-like domain CC antigenic site, and v91219-v90211 are MWH The peptides CDR2-like domain cc enlis. v90212 is a modified version of a human IgE (immunoglobulin CC E) CH3 domain, and v90213-v90219 are Thepitope/IgE CH3 antigenic cells. v90212 is a modified version of a human IgE (immunoglobulin CC E) CH3 domain, and v90213-v90219 are The epitope/IgE CH3 antigenic cells. v90212 to used in the treatment of allergies. v91220 is comprised from foot and mouth disease virus (FMDV) vP1 capsid comprises the cs antigen and an MVF The pitope and may be used in a malaria vaccine. v91228-v91231 represent CETP-derived peptides comprise the CS antigen and an MVF The peptide and a The pitope and may be used to prevent or treat arteriosclerosis and CC epitope which may be used to prevent or treat arteriosclerosis and CC epitope which may be used to prevent or treat arteriosclerosis and CC epitope which may be used to prevent or treat arteriosclerosis and CC epitope which may be used to prevent or treat arteriosclerosis and CC epitope. valual and v91248-v91251 and v91258-v91273 are antigenic comprising MVH Thend HIV-1 B-cell epitope which may be used as CC epitope which in an anti-HIV-1 vaccine. v91198 and v91299 are respectively continuatory invasin protein epitope from versinia species, and CC antigenic peoptides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Best Local
W09966957-A2
                                                                                                                                                                     cholesteryl ester
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human cholesteryl transport protein (CETP) peptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y91230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   measles virus F (MVF) protein and sequences Y91122-Y91142, Y91246 Y91245-Y91246 represent synthetic Th epitopes based on the MVF Th epitope. Sequence Y91143 represents a promiscuous Th epitope from hepatitis B virus (HBV) surface antigen, and sequences Y91144-Y91 synthetic epitopes derived from this HBV epitope. Y91156-Y91196, Y91227 and Y91242-Y91244 are antigenic peptides comprising an LHRI
                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                         Promiscuous T-cell epitope; measles virus F protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-MAY-2000 (first entry)
                                                                                                                                                                                                                                                                 Promiscuous T-cell epicope, "Course immunogenic; B-cell epicope, nepatitis B virus surface antigen; HBV; immunogenic; B-cell epicope, nepatitis B virus surface antigen; HBV; immunogenic; B-cell epicope, nepatitis B virus surface antigen; HBV; immunogenic; B-cell epicope, nepatitis B virus surface; HIV-1; antiviral; FMDV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Y91230 standard; peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Th (functional in genetically diverse subjects) into an immunogen improves capacity to induce a strong T helper cell-mediated immune response, resulting in production of antibodies against a target antigen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence Y91121 represents a promiscuous T helper epitope from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          treating allergies or arteriosclerosis. Incorporation of a promiscuous Th (functional in genetically diverse_subjects) into an immunogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10
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                                                                                                                            Inising norman promotion; CD4 receptor; hiving growth promotion; CD4 receptor; light anti-allergic; and mouth disease virus; immunoglobulin E; IgE; anti-allergic; and mouth disease virus; immunoglobulin E; IgE; anti-allergic; and modium falciparum; circumsporozoite; antimalarial; CETP; modium falciparum; circumsporozoite; anti-arteriosclerotic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61.9%; Score 83; DB 21; 100.0%; Pred. No. 1.4e-06; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEC ID NO:108
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cc immunotherapy; for inhibition of the action of jutelinsing hormone (LHRH) for contraception, treatment of hormone creatment cancer, prevention of the action of jutelinsing hormone complete the contraception, treatment of hormone complete the contraception, treatment of hormone complete the contraception, treatment of hormone complete the contraception of a promiscuous of a promiscuous of the action of allering the growth of animals; or for treating allering an expectation of a promiscuous of the pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport protein (CETP) or HIV epitopes, but more generally against any pathogen, immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of infections (HIV, foottand-mouth disease or malaria); for cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis or human immune deficiency virus -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention relates to novel promiscuous T helper cell epitopes (Th), immunogenic peptides comprising the Th epitopes of the invention ng with B cell epitopes. The Th epitopes and peptide immunogens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 62; 129pp; English.
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16

Query Match Best Local Similarity 15; Conservative 59.0%; 93.8%; Score 79; Pred. No. 5 Mismatches DB Length 16 Indels 0

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Best Local
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This sequence represents an immunogenic fragment of the rabbit cholesteryl ester transferase protein (CETP). The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lesse transfer of cholesteryl esters from high density lipoprotein (HDL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cholesteryl ester transferase protein (CETP).

The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesteryl esters from HDL particles and for increasing the CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
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                                                                                                                                                                                             (MONS ) MONSANTO
                                                                                                                                                                                                                       19-SEP-1997;
                                                                                                                                                                                                                                                                                                                               Oryctolagus sp.
                                                                                                                                                                                                                                                                                                                                                                  antibody production; cholesteryl ester transfer; therapy high density ilpoprotein; HDL cholesterol concentration;
                                                                                                           New recombinant DNA vaccines
                                                                                                                                       WPI; 1999-276984/23
                                                                                                                                                                                                                                                                                                                                                           pro-atherogenic
                                                                                                                                                                                                                                                                                                                                                                                                  CETP; cholesteryl-ester transfer
                                                                                                                                                                                                                                                                                                                                                                                                                          Rabbit CETP immunogenic fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Y13809 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 88; 99pp; English.
                                                                                    Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   l Similarity
22; Conser
                                                                                                                                                                  Needleman
                                                                                Page 73; 99pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82.8%;
100.0%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                   protein; recombinant DNA vaccine;
ester transfer; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.1e-10;
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 (HDL).
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RESULT
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Best Local
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                                                                                                                                                                                                          New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis
                                                                                                                                                                                                                                                                            Wang
                                                                                                                                                                                                                                                                                                                                                                                                     W09966957-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Promiscuous T-cell epitope; measles virus F protein; hepatitis B virus surface antigen; HBV; immunogenic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human cholesteryl transport protein (CETP) peptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            method can provide an autogenic immunological process for lessening th transfer of cholesteryl esters from HDL particles and for increasing th HDL cholesterol concentration of a mammal whose blood also contains CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by 10w HDL/LDL cholesterol ratios. method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
                                                                                                                                                                           Claim 10;
                                                                                                                                                                                                                                                                                                    (UNBI-) UNITED BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                                               20-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                      21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                              29-DEC-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                immune deficiency virus
                                                                                                                                                                       Page 50; 129pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                             98US-0100412.
                                                                                                                                                                                                                                                                                                                                                      99WO-US13975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79.9%;
95.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 107; DB 20;
Pred. No. 4.3e-10;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO:107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      eptive; anticancer; antiviral; FMDV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for lessening the for increasing the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                epitope;
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The invention relates to novel promiscuous T helper cell epitopes (Th), and immunogenic peptides comprising the Th epitopes of the invention along with B cell epitopes. The Th epitopes and peptide immunogens containing them, are used to induce a T helper cell response, specifically against Plasmodium falciparum, cholesteryl ester transport protein (CETP) or HIV epitopes, but more generally against any pathogen, immunoreactive self-antigen or tumour antigen. The Th epitopes and peptide immunogens may be used for prevention and/or treatment of infections (HIV, foot-and-mouth disease or malaria); for cancer immunotherapy; for inhibition of the action of lutelnising hormone dependent cancer, prevention of boar taint in meat, and remained the second of the section of the second of the section of the section of the section of boar taint in meat, and

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RESULT
Y13815
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC antigenic peptide used in these LHRH antigenic peptides. Y91200 is CC somatostatin, and Y91201-Y91207 are antigenic peptides. Y91200 is CC somatostatin and a Th epitope. Somatostatin immunogens may be used CC to promote growth in livestock. Y91208 is a human CD4 CDR2-like domain CC antigenic site, and Y91209-Y90211 are MVH Th epitope/CD4 CDR2-like domain CC antigenic speptides which may be used to prevent HIV infection of T CC cells. Y90212 is a modified version of a human IGE (immunoglobulin CC E) CH3 domain, and Y90213-Y90219 are Th epitope/IGE CH3 antigenic CC peptides which may be used in the treatment of allergies Y91220 is comprise the croatment of allergies Y91220 is competide derived from foot and mouth disease virus (FMDV) VPI capsid CC protein and Y91221-Y91222 comprise this peptide and a Th epitope. Y91228 is a Plasmodium falciparum circumsporozoite (CS) target antigen, and CC 13124-Y91225 comprise the CS antigen and an WF Th epitope and may be used to prevent or treat arteriosclerosis and CC epitope which may be used to prevent or treat arteriosclerosis and CC epitope which may be used to prevent or treat arteriosclerosis and CC epitopes, and Y91248-Y91251 and Y91259-Y91273 are antigenic CC peptides comprising MY1248-Y91251 and Y91259-Y91273 are antigenic CC peptides comprising which may be used as CC ancharacter peptide, both of which may optionally be used in the control of the invention.

CC antigenic peptides of the invention of the pitope from Yersinia species, and CC antigenic contides of the invention.
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Best Local :
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CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; HDL; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration; pro-atherogenic dyslipoproteinaemia.
                                                                                                                                                                                          Rabbit CETP immunogenic fragment
                                                                                                                                                                                                                                                                   08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                               Y13815 standard; peptide; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptides of the invention
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                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87.3%;
92.0%;
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Best Local S
Matches 22
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                                                                                                                                                                       CETP; cholesteryl-ester transfer protein; recombinant DNA antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration;
          (MONS ) MONSANTO CO
                                    19-SEP-1997;
                                                                                                                                                                                                                           Human CETP immunogenic fragment.
                                                                                                                                                                                                                                                       08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This sequence represents an immunogenic fragment of the rabbit cholesteryl ester transferase protein (CETP).
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                                                           17-SEP-1998;
                                                                                                            WO9915655-A1
                                                                                                                                     Homo sapiens
                                                                                                                                                             pro-atherogenic
                                                                                                                                                                                                                                                                                                      Y13821 standard; peptide; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 75; 99pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New recombinant DNA vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-SEP-1997;
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22; Conser
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                                    97US-0934367
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                                                            98WO-US19366
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                                                                                                                                                             dyslipoproteinaemia.
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                                                                                                                                                                                                                                                                                                                                                                                                                    82.8%; Score 111;
100.0%; Pred. No.
Live 0; Mismatch
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                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 22
                                                                                                                                                                                                 vaccine; HDL;
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Best Local Similarity
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Note: Sequence Y91227 is also designated SEQ ID NO:106 in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CETP; cholesteryl-ester transfer protein; recombinant DNA vaccine; antibody production; cholesteryl ester transfer; therapy; high density lipoprotein; HDL cholesterol concentration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a peptide derived from foot and mouth disease virus (FMDV) VPI capsid protein and Y91221-Y91222 comprise this peptide and a Th epitope. Y91223 is a Plasmodium falciparum circumsporozoite (CS) target antigen, and Y91224-Y91225 comprise the CS antigen and an MVF Th epitope and may be used in a malaria vaccine. Y91228-Y91231 represent CETP-derived peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 somatostatin and a Th epitope. Somatostatin immunogens may be used to promote growth in livestock. Y91208 is a human CD4 CDR2-like domain antigenic site, and Y91209-Y90211 are MVH Th epitope/CD4 CDR2 antigenic peptides which may be used to prevent HIV infection of T cells. Y90212 is a modified version of a human IgE (immunoglobulin E) CH3 domain, and Y90213-Y90219 are Th epitope/IgE CH3 antigenic peptides which may be used in the treatment of allergies. Y91220 is
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oryctolagus
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WPI; 1999-276984/23
                                                                                                                                                                                                19-SEP-1997;
                                                                                                                                                                                                                                                                17-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pro-atherogenic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Y13802 standard; peptide;
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                                                                                                                            (MONS ) MONSANTO CO.
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                                                                Needleman P;
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Pred. No. 3.9e-14;
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\begin{array}{c} C\ C\ C\ C\ X\ P\                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
Y91231
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Best Local
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The invention relates to novel promiscuous T helper cell epitopes (Th), and immunogenic peptides comprising the Th epitopes of the invention along with B cell epitopes. The Th epitopes and peptide immunogens
                                                                                                                                                                                                                                                                                                                                            Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hepatitis B virus surface antigen; HBV; immunogenic; B-cell epitope luteinising hormone releasing hormone; LHRH; contraceptive; antican somatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMD foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic; PHD plasmodium falciparum; circumsporozoite; antimalarial; CETP;
                                                                                                                   Claim 10;
                                                                                                                                                                    New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis or human immune deficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Promiscuous T-cell epitope; measles virus F protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human cholesteryl transport protein (CETP) peptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAY-2000
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                                                                                                                                                                                                                                                                                     WPI; 2000-160564/14
                                                                                                                                                                                                                                                                                                                                                                                                (UNBI-) UNITED
                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-JUN-1998;
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                                                                                                             62; 129pp;
                                                                                                                                                                                                                                                                                                                                                                                                   BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0100412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US13975.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      transport
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87.3%;
92.0%;
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                                                                                                             English.
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1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
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.5e-11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO:109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  eptive; anticancer;
antiviral; FMDV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MVF;
B-cell epitope;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26;
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RESULT
Y13801
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Best Local
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    The invention relates to recombinant DNA vaccines that contain DNA encoding CETP, which can be used for producing antibodies to lessen the transfer of cholesteryl esters from high density lipoprotein (HDL). The method can provide an autogenic immunological process for lessening the transfer of cholesteryl esters from HDL particles and for increasing the HDL cholesterol concentration of a mammal whose blood also contains CETP. The method may be useful in treating human pro-atherogenic dyslipoproteinaemias characterised by low HDL/LDL cholesterol ratios. The method can have an effect that lasts for months as compared to the short-term effects of the small molecule drugs now available.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A B-cell epitope (W06128) comprising the C-terminal 26 amino acids of human liver mature cholesteryl ester transfer protein (CETP) (see also W06127) is involved in a neutral lipid binding or a transfer activity of CETP. It can be linked to a universal or broad range immunogenic T-cell epitope, such as that found at amino acids 830-843 of tetanus toxoid protein, to produce a synthetic vaccine (see also W06129) that elicits an immune response against endogenous CETP activity, thereby treating or preventing cardiovascular disease, such as atherosclerosis. It may also be incorporated into a multivalent vaccine (see also W06131) including another CETP B-cell epitope.
                                                                                                                                                                                                                                                New
                                                                                                                                                                This sequence represents an immunogenic fragment of the rabbit cholesteryl ester transferase protein (CETP).
                                                                                                                                                                                                                  Claim 15;
                                                                                                                                                                                                                                                                                                          Glenn K,
                                                                                                                                                                                                                                                                                                                                        (MONS ) MONSANTO CO
                                                                                                                                                                                                                                                                                                                                                                       19-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                    17-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pro-atherogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antibody production; cholesteryl ester transfer; therapy high density lipoprotein; HDL cholesterol concentration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CETP; cholesteryl-ester transfer protein; recombinant DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rabbit CETP immunogenic fragment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            recombinant DNA vaccines
                                                                                                                                                                                                                                                                             1999-276984/23
                                                                                                                                                                                                            Page 85; 99pp; English.
                                                                                                                                                                                                                                                                                                         Needleman P;
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llarity 100.0%;
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Pred. No. 3.9e-14;
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                                        ratios. The
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RESULT
Y91228
ID Y9
CC The invention relates to novel promiscuous T helper cell epitopes (Th), CC along with B cell epitopes comprising the Th epitopes of the invention CC along with B cell epitopes. The Th epitopes and peptide immunogens CC containing them, are used to induce a T helper cell response, CC specifically against Plasmodium falciparum, cholesteryl ester transport CC protein (CETP) or HIV epitopes, but more generally against any pathogen, CC immunoreactive self-antigen or tumour antigen. The Th epitopes and CC peptide immunogens may be used for prevention and/or treatment of CC infections (HIV, foot-and-mouth disease or malaria); for cancer CC immunotherapy; for inhibition of the action of luteinising hormone (CIRH) for contraception, treatment of hormone-CC dependent cancer, prevention of boar taint in meat, and CC treating allergies or arteriosclerosis. Incorporation of a promiscuous CC Th (functional in genetically diverse subjects) into an immunogen improves capacity to induce a strong T helper cell-mediated immune CC response, resulting in production of antibodies against a target antigen. CC Th can replace carrier proteins and pathogen derived T helper epitopes. CC Sequence Y91121 represents a promiscuous T helper epitope from the CC measles virus F (MVF) protein and sequences Y91127-Y91142, Y9126 and CC Y91245-Y91246 represent synthetic Th epitopes based on the MVF Th
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Best Local S
Matches 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New artificial T helper cell epitope and derived immunogens with target antigenic site, for immunization against e.g. malaria, arteriosclerosis or human immune deficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 10; Page 49; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-160564/14.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             somatostatin; growth promotion; CD4 receptor; HIV-1; antiviral; FMD
foot and mouth disease virus; immunoglobulin E; IgE; anti-allergic;
Plasmodium falciparum; circumsporozoite; antimalarial; CETP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-MAY-2000
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Pred. No. 3.9e-14;
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B-cell epitope;
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Copyright (c) 1993 - 2000 Compugen
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RESULT W06128 Cholesteryl ester transfer protein; CETP; antigen; vaccine; cardiovascular disease; atherosclerosis; B-cell epitope. Human cholesteryl ester transfer protein C-terminal B-cell epitope 07-FEB-1997 (first entry) 07-NOV-1996. W09634888-A1. Homo sapiens W06128; W06128 standard; Peptide; 26 WH HOW Ą

Rittershaus CW, Thomas LJ; (TCEL-) T CELL SCI INC.

01-MAY-1995; 01-MAY-1996;

95US-0432483 96WO-US06147.

of child and

WPI; 1996-506103/50.

Cholesteryl ester transfer protein B cell epitope linked to T cell epitope - used to generate vaccine to regulate CETP activity for decreasing the risk of developing a cardiovascular disease e.g. atherosclerosis

Claim 5; Page 41; 72pp; English.

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RESULT
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MEDIINE; 94222573.
MASSAD G., Bahrani F.K., Mobley H.L.;

"Proteus mirabilis fimbriae: identification, isolation, characterization of a new ambient-temperature fimbria.", characterization of a new ambient-temperature fimbria.", nfect. Immun. 62:1989-1994(1994).

Infect. Immun. 62:1989-1994(1994).

20 AA; 2017 MW; BZFC481003883AE2 CRC64;
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                                 01-MAY-2000 (TrEMBLrel.
01-MAY-2000 (TrEMBLrel.
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PROSTASIN (FRAGMENT)
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AMBIENT-TEMPERATURE FIMBRIA; ATF.
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01-JUL-1997 (TrEMBLrel. 04, Last sequence)
01-NOV-1999 (TrEMBLrel. 12, Last annotat
HYPOTHETICAL 2.3 KDA PROTEIN (FRAGMENT).
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5; Mismatches 3;
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Pred. No. 8.3e+02;
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O1-MAY-2000 (TremBLrel. 1
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Q9TWL4;
Q9TWL4;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Q25 KDA CHYMOTRYPSIN-LIKE ENZYME (FRAGMENT).
Lucilia cuprina (Greenbottle fly) (Australian sheep blowfly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Musccia;
                          SEQUENCE.
MEDLINE; 953
Casu R.E., F
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Yu J.X., Chao
"Prostasin is
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                                                                                                                                                  Pterygota; Neoptera; Endopterygota; Diptera; Brachycera;
Oestroidea; Calliphoridae; Lucilia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Artocarpus champeden.
Eukaryota; Viridiplantae; Embryophyta;
Magnoliophyta; eudicotyledons; Rosidae;
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J. Biol. Chem.
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Pred. No. 1e+(
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Insect Mol.
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SEQUENCE
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J. Basic Microbiol. 32:13-19(1992).
SEQUENCE 19 AA; 1923 MW; 84726D1A1282FB63 CRC64;
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01-MAY-2000 (TrEMBLrel.
01-JUN-2000 (TrEMBLrel.
NITRILE HYDRATASE ALPHA
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Duran R., Chion C.K., Bigey F.,
"The N-terminal amino acid seque
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                                                                                                                                                                                                                                                                                                                                                                               Bacteria;
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  Similarity
5; Conserv
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6; Conservative
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Proteobacteria; beta subdivision;
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1. Biol. 3:201-211(1994).
18 AA; 1922 MW; 352EB0729B126B11 CRC64;
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Micrococcineae; Brevibacteriaceae.
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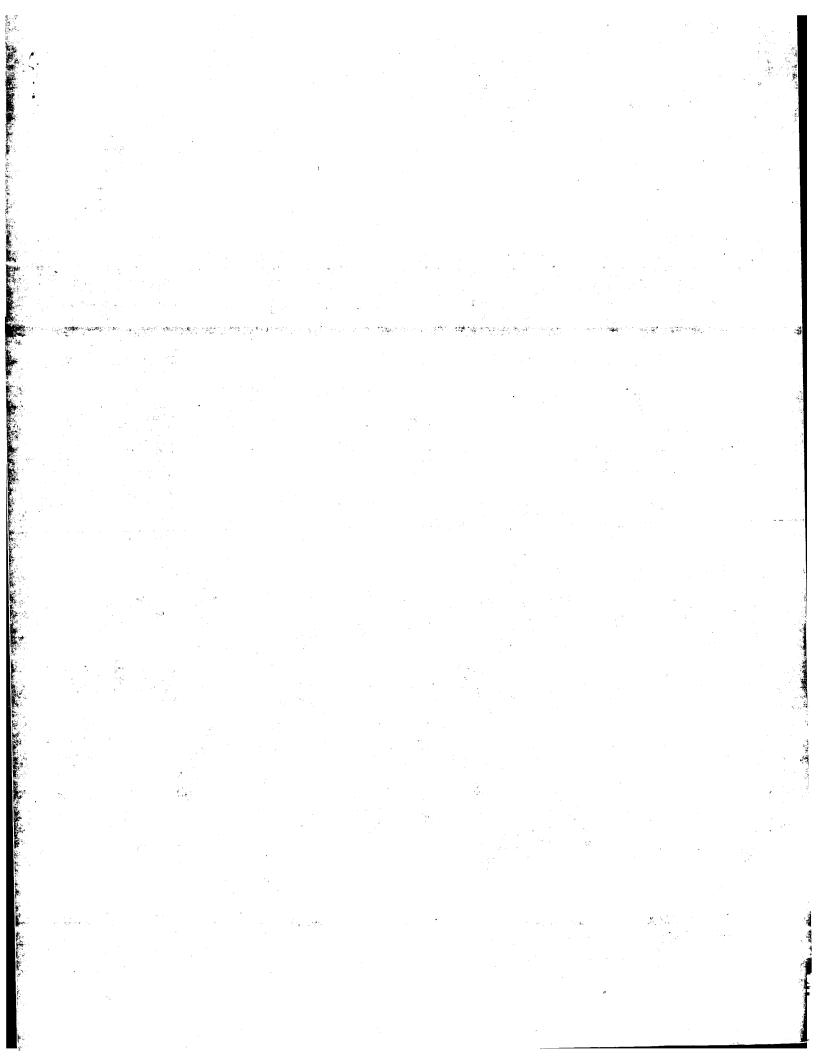
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RESULT
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NON_TER 1 18
SEOURD A. Heaney S., Zhang X., Miche. Seourd S., Miche. Seourd S., Miche. Seourd S., Miche. S., Mich. S., Miche. S., Miche. S., Miche. S., M
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Q62637;
Q1-NOV-1996
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Q9U8F7;
Q9U8F7;
01-MAY-2000
01-MAY-2000
                                                                                                                                                             EMBL; U08
NON_TER
VARIANT
NON_TER
SEQUENCE
                                                                                                                                                                                                                                        MEDLINE; 94268906.
Chow C.W., Clark M., Rinaldo J., Chalkley R.;
Chow C.W., Clark M., Rinaldo J., Chalkley R.;
"Identification of the rat xanthine dehydrogenase/oxidase
Nucleic Acids Res. 22:1846-1854(1994).
EMBL; U08123; AAB60444.1; -
                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
XANTHINE DEHYDROGENASE (FRAGMENT).
Rattus norvegicus (Rat).
Eukaryota, Metazoa; Chordara; Craniata; Vertebrata;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ephydroidea;
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Drosophila melanogaster (Fruit fly).
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Pterygota;
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Neoptera; Endopterygota; Diptera; Brachycera; Musc
a; Drosophilidae; Drosophila.
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Pred. No. 1.6e
1; Mismatches
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Pred. No. 1.7e+03;
3; Mismatches 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  score greater than or equal to the score of the result bein and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being
              Issued_Patents_AA:*
1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
5: /cgn2_6/ptodata/2,
         US-08-934-367-33
107
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gapop 10.0 , Gapext 0
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Copyright (c) 1993 - 2000 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /cgn2_6/ptodata/2/laa/5A_COMB.pep:*
/cgn2_6/ptodata/2/laa/5B_COMB.pep:*
/cgn2_6/ptodata/2/laa/ECTUS_COMB.pep:*
/cgn2_6/ptodata/2/laa/bcTUS_COMB.pep:*
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US-08-440-661-11
US-08-448-021-3
US-08-468-540B-1
US-08-468-540B-1
US-08-974-775-12
US-08-974-775-13
US-08-974-775-39
US-08-974-775-39
US-08-974-775-39
US-08-974-775-39
US-08-974-775-39
US-08-974-775-39
US-08-159-339A-58
US-08-21-580-7
PCT-US95-04018-69
US-08-432-871C-73
US-08-748-74-18
US-08-974-718-13
US-08-974-718-13
US-08-974-718-13
US-08-974-718-13
US-08-974-718-13
US-08-974-718-13
US-08-975-08-973
US-07-963-321-23
US-08-548-540-23
US-08-548-540-23
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3.355 Million cell updates/sec
Sequence 135, Applisequence 176, Applisequence 176, Applisequence 176, Applisequence 176, Applisequence 176, Applisequence 176, Applisequence 187, Applisequence 287,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 have
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US-08-159-339A-935
       US-08-159-339A-935
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Patent No.
                                                                                                                                                                                                                           CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/926,666
FILLING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILLING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILLING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 018623-0050
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                     LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
APPLICATION UNBER: US/08/159,339A
FILING DATE: 29-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: HLA I TITLE OF INVENTION: Uses NUMBER OF SEQUENCES: 125
                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
APPLICANT: Sette, Alessandro
APPLICANT: Celis, Esteban
                                                                                                                                                                                                          TELEFAX: (415) 576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM CONTROL OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 94111-3834
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CITY: San Francisco
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o. 6037135
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US-08-951-871-10

US-08-482-142-80

US-08-613-235-6

US-08-107-676-21
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US-08-273-274-32
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US-08-462-351-8
5194425-9
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Result

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Database :

Sequence:

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US-08-159-339A-1076
; Sequence 1076, Application US/08159339A
; Patent No. 6037135
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; FRAGMENT TYPE:
US-08-440-861-11
                                                                              RESULT
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SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/440,861

FILING DATE: 15-MAY-1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION DATA:
INFORMATION: 08/106,016

FILING DATE: 31-AUG-1993

ATTORNEY, AGENT INFORMATION:
NAME: Amy E. Mandragouras

REGISTRATION NUMBER: 36,207

REFERENCE/DOCKET NUMBER: IPC-075 (IMI-040cp)

TELEPHAN: (617) 227-7400

TELEPHAN: (617) 227-7401

TELEPHAN: (617) 227-5411
                                                                                                                                                                                          Matches
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Best Local
                GENERAL INFORMATION:
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 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Kuo, Mei-Chang
APPLICANT: Lugman, Mohammad
TITLE OF INVENTION: T CELL EPITOPES OF RYEGRASS POLLEN
TITLE OF INVENTION: ALLERGEN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Griffith, Irwin J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: BO STATE: 1 COUNTRY:
                                                                                                                                                                                       Local Similarity
nes 6; Conserv
                                                                                                                                                                                                                                                                                                                           LENGTH: 20 amino TYPE: amino acid
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nes 5; Conserv
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                                                                                                                             3 LIPKLDTAYDVAY 15
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: Massachusetts
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5710126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
Kubo, Ralph T.
                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                    linear
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                                                                                                                                                                                                                                                                                    peptide
internal
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50.0%;
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Pred. No.
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Pred. No.
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Query Match
Best Local Similarity
Watches 5; Conserv
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US-08-483-021-3
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                                                                                                                                                                                                                                  Sequence 3, Application US/08483021 Patent No. 5734023
                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
TELEFAX: (415) 576-0300
                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew
STREET: One Market Plaza, Steuart Street Tower
                                                                                     TITLE OF INVENTION: MHC Subunit Conjugates Useful in TITLE OF INVENTION: Ameliorating Deleterious Immune Responses NUMBER OF SEQUENCES: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS: sir
TOPOLOGY: linear
MOLECULE TYPE: pept
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 1254
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 07-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM CONTROL OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
ZIP: 94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acids
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CITY: San Francisco
 STATE:
                                                                                                                                                                                                                                                                                                                                            1 RPSQRHGSKY 10
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San Francisco
California
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                                                                                                                                                          Nag, Bishwajit
Clark, Brian R.
Sharma, Somesh
                                                                                                                                         McConnell, Harden
                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Grey, Howard M.
Sette, Alessandro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IBM Compatible
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                                                                                                                                                                                                                                                                                                                                                                                                               Score 30; DB Pred. No. 20; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 10;
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NAME/KEY: Peptide
LOCATION: 1..14
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
RESULT 5
US-08-468-540B-1
; Sequence 1, Application US/08468540B
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                                                                                                                                     Query Match
Best Local Similarity
""" hes 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 08 FILING DATE: 02-MAR-1995 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/978,946
FILING DATE: 18-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/690,840
FILING DATE: 23-APR-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07
FILING DATE: 12-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Rele
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
ZIP: 941
                                                                                                                                                                                                                                                                                                                                     LOCATION: 1
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: Li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/793,938 FILING DATE: 19-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 0: FILING DATE: 23-JUN-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Bastian, Kevin L. REGISTRATION NUMBER: 34,774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
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                                                                                                                     9 RPDQQHSVAY 18
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                                                                                        RPSQRHGSKY 14
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94105-1492
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                                                                                                                                                                                                                                                                                                                                                                                                                      Linear
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02-MAR-1995
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peptide analog of MBP(1-14)4-A"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         us 07/367,751
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                                                                                                                                                                    Score 30;
Pred. No.
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Best Local 9
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GENERAL INFORMATION
                                                                                                                                                                                                                GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino ac
STRANDEDNESS:
TOPOLOGY: lin
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FASTSEQ for Windows Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/468,540B FILING DATE: 06-JUN-1995 CLASSIFICATION: 514 PRIOR APPLICATION DATA:
COMPUTER READABLE FORM
                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                             APPLICANT: Steinman, APPLICANT: Waisman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Jacobs, Seth H
REGISTRATION NUMBER: 32,140
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
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COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby P.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Weiner, Howard
APPLICANT: Hailer, David
APPLICANT: Miller, Ariel
APPLICANT: Miller, Ariel
APPLICANT: A1-Sabbagh, Ahmad
APPLICANT: A1-Sabbagh, Ahmad
TITLE OF INVENTION: SUPPRESSION OF T-CELL PROLIFERATION
TITLE OF INVENTION: USING PEPTIDE FRAGMENTS OF MYELIN BASIC PROTEIN
                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM CON OPERATING SYSTEM:
                          COUNTRY:
                                           CITY: San Francisco
STATE: California
                                                                            ADDRESSEE: FLEHR, HOHBACH, TEST, STREET: 4 Embarcadero Center, Su:
                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 5; Conserv
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ZIP: 10022
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STATE: NY
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               94111-4187
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                                                                            ST, ALBRITTON & HERBERT Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                DB
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                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
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Best Local Similarity
Watches 5; Conserve
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TELEPAX: (415) 494-8771
TELEX: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENCTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 14 LENGTH: 20
                                                                         Matches
                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 14,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent No. 6039947
                                                                                                                                                                                                                                                                     EARLIER APPLICATION NUMBER: PCT/US88/02139
EARLIER FILING DATE: 1988-06-24
EARLIER APPLICATION NUMBER: 07/065,734
EARLIER FILING DATE: 1987-06-24
NUMBER OF SEQ ID NOS: 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Howard L. Weiner
APPLICANT: David A. Hafler
TITLE OF INVENTION: PEPTIDES DERIVED FROM IMMUNODOMINANT
TITLE OF INVENTION: EPITOPES OF MYELIN BASIC PROTEIN
FILE REFERENCE: 1010/05723US3
                                                                                                                                                                                                                                                                                                                                                                 EARLIER APPLICATION NUMBER: 08/059,189
EARLIER FILING DATE: 1993-05-06
EARLIER APPLICATION NUMBER: 07/502,559
EARLIER FILING DATE: 1990-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/08/297,395A CURRENT FILING DATE: 1994-08-11
                                                                                                                                                                                                     TYPE: PRT
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ATTORNEY/AGENT INFORMATION:
NAME: Sherwood, Pamela J.
REGISTRATION NUMBER: 36,677
REFERENCE/DOCKET NUMBER: A-63005/PJS STAN-187
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                     Local Similarity
nes 5; Conserv
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COMPUTER: I
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                                  9 RPDQQHSVAY 18
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RPSQRHGSKY 14
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                                                                     Conservative
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50.0%;
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50.0%;
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                                                                       1; Mismatches
                                                                                        Score 30;
Pred. No.
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Pred. No. 44;
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                                                                                                         DB 3;
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;; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-974-775-12
                                                                                                                                                                                                                                                                                                                                                            RESULT 9
US-08-974-775-11
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                                                                                                                                                                                                                                                                                                                     Sequence 11, Application US/08974775 Patent No. 6096706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 45.5%;
Matches 5; Conservative
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/974,775
FILING DATE: 20-NOV-1997
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Toback, F. Gary
APPLICANT: Walsh-Reitz, Margaret
TITLE OF INVENTION: GROWTH-PROMOTING PROTEINS AND PEPTIDES
TITLE OF INVENTION: FOR KIDNEY EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 312-321-4299 INFORMATION FOR SEQ ID NO:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Martin, Alice O.
REGISTRATION NUMBER: 35,601
REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-321-4200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Toback, F. Gary
APPLICANT: Walsh-Reitz, Margaret
TITLE OF INVENTION: GROWTH-PROMOTING PROTEINS AND PEPTIDES
TITLE OF INVENTION: FOR KIDNEY EPITHELIAL CELLS
                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                   ADDRESSEE: BRINKS, HOFER, STREET: NBC Tower - Suite STREET: Plaza Drive CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: 312-321-4299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: BRINKS, HOFER, GILSON & LIONE
STREET: NBC Tower - Suite 3600, 455 N. Cityfront
STREET: Plaza Drive
CITY: Chicago
STATE: Illinois
                                              ZIP: 60611-5599
                                                             COUNTRY:
                                                                                   STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
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Pred. No.
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RESULT 10
US-08-974-775-39
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PARENT NO. DEPTION:
GENERAL INFORMATION:
APPLICANT: Toback, F. Gary
APPLICANT: Toback, F. Gary
APPLICANT: Walsh-Reitz, Margaret
TITLE OF INVENTION: GROWTH-PROMOTING PROTEINS AND PEPTIDES
TITLE OF INVENTION: FOR KIDNEY EPITHELIAL CELLS
TITLE OF SEQUENCES: 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 5; Conserv
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TELEFAX: 312-321-4299
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                  TELEFAX: 312-321-4299
NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                 NAME: MARTIN, Alice O.
REGISTRATION NUMBER: 35,601
REFERENCE/DOCKET NUMBER: 78:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-321-4200
                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                          CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-321-4200
TELEFAX: 312-321-4299
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/974,77
                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: NBC Tower - S
STREET: Plaza Drive
CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Martin, Alice O.
REGISTRATION NUMBER: 35,601
REFERENCE/DOCKET NUMBER: 7814/27
                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
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             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                 ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 PRPDQQHSVAY 18
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                                amino acid
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                                                    14 amino acids
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linear
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45.5%;
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                                                                                                                                                           7814/27
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Pred. No. 44;
0; Mismatches
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Query Match
Best Local Similarity
Whiches 4; Conserve
                                                                                                      ; MOLECULE TYPE: US-08-159-339A-558
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                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM: DOS
SOFTWARE: FRASLSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29 NOV-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 07-AUG-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Webber, Ellen Lauver
REGISTRATION NUMBER: US 08/103,396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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Best Local :
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                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEPAX: (415) 576-0300
TELEEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Grey, Howard M
APPLICANT: Sette, Alessan
APPLICANT: Celis, Esteban
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
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                                                                                                                                TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                          LENGTH:
                                                                                                                                                                                                                                                                                                                                    NAME: Weber, Ellen I
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER:
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nes 4; Conserv
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                Conservative
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                Mismatches
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Pred. No.
                             Score 27; DB
Pred. No. 67;
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              Indels
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RESULT 13
PCT-US95-04018-69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: DeLUCA, MARK
REGISTRATION NUMBER: 33,229
REFERENCE/DOCKET NUMBER: CCOR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
TELEFAX: 215-568-3439
INFORMATION FOR SEQ ID NO: 7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 7, Application US/08221580 Patent No. 5519000 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                   Sequence 69, Application PC/TUS9504018 GENERAL INFORMATION:
                                                                                                                                                                                                 APPLICANT: APPLICANT:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Mervic,
APPLICANT: Weber, I
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                              TITLE OF INVENTION: TU NUMBER OF SEQUENCES: 7 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 9
COMPUTER READABLE FORM:
                                                                                                                                                                                     APPLICANT:
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                                               STREET: One Libert;
CITY: Philadelphia
STATE: Pennsylvania
                            COUNTRY:
                                                                                               ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & ADDRESSEE: Norris
                                                                                                                                                                                                                                                                                                                                                                                        12 QQHSVAYTF 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
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: United States of America
                                               Pennsylvania
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Mervic, Miljenko
Weber, Robert W.
                                                                             One Liberty Place
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Kruszynski, Marian
                                                                                                                                                                                 Kruszynski, Marian
Mervic, Miljenko
Weber, Robert W.
                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                  Tumor Necrosis Factor Inhibitors: 76
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Pred. No.
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Best Local Similarity
The 5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 73, Application US/08432871C Patent No. 5877010 GENERAL INFORMATION:
             SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/432,871C
FILING DATE: 02-MAY-1995
CLASSIFICATION: 514
ATTORNBY/ACENT INFORMATION:
NAME: MCMasters, David D.
REFERENCE/DOCRET NUMBER: 33,963
REFERENCE/DOCRET NUMBER: 240052.409C1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (215) 568-343 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                  ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FORM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 01-APR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/221,581
FILING DATE: 01-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/221,580
FILING DATE: 01-APR-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: WordPerfect 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Loeb, Lawrence A.
APPLICANT: Black, Margaret E.
TITLE OF INVENTION: THYMIDINE KINASE MUTANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: CC
TELECOMMUNICATION INFORMATION:
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ATTORNEY/AGENT INFORMATION:
NAME: DeLuca, Mark
                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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COMPUTER: II
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                                                                                                                                                                                                                                                                                                             STATE: Washington
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(206) 622-4900
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Pred. No. 9
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Gaps

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; TELEFAX: (206) 682-6031
; TELEX: 3723836
; INFORMATION FOR SED ID NO: 7
; SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
US-08-432-871C-73
Search completed: December 21, 2000, 08:31:50 Job time: 373 sec
                                                                                           DЬ
                                                                                                                          ş
                                                                                                                                                                                                                                                        ; TYPE: amino acid ; TOPOLOGY: linear US-07-678-974D-8
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US-07-678-974D-8
                                                                                                                               Query Match
Best Local Similarity 44...
Best Focal Similarity 44...
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 1730 RHODE ISLAND AVENUE, N.W.,

STREET: 1730 RHODE ISLAND AVENUE, N.W.,

CITY: WASHINGTON

STATE: D.C.

COUNTRY: U.S.A.

ZIP: 20036-3186

COMPUTER READABLE FORM:

MEDIUM TYPE: FLOPPY disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PAtentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/678,974D

FILING DATE: 25-UN-1991

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: AISENBERG, ITWIN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 25.2%;
Best Local Similarity 42.9%;
Matches 6; Conservative
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                                                                                                                                                                                                                                                                                                          TELEFAX: 202-872-0493
TELEX: 440 069 AIS UI
INFORMATION FOR SEQ ID NO: 8
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
TITLE OF INVENTION: METHOD FOR DETECTION OF
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSE: BERMAN & AISENBERG
STREET: 1730 RHODE ISLAND AVENUE, N.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 19,007
REFERENCE/DOCKET NUMBER: SC19171
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-293-1404
TELEFAX: 202-872-0493
                                                                                                                        4 KFLFP-----RPDQQHSV 16
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                                                                           (206) 682-6031
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Pred. No. 1.8e+02;
0; Mismatches 5;
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Pred. No. 1.1e+02;
"" matches 2;
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.

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11.273 Million cell updates/sec
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16K protein - poul
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A; Accession: S10059
A; Accession: S10059
A; Molecule type: protein
A; Residues: 1-12 <YAS>
A; Experimental source: skin
A; Experimental source: skin
A; Experimental source is designated as Hylambates maculatus
C; Keywords: amidated carboxyl end; neuropeptide; tachykinin
F; 12/Modified site: amidated carboxyl end (Met) #status predicted
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Biomed. Res. 2, 613-617, 1981
A;Title: New tachykinins, Glu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tachykinin - African tree frog (Kassina maculata)

N;Alternate names: hylambates-kassinin

C;Species: Kassina maculata

C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 24-Mar-1999

C;Accession: S10059
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A61007	XAVI6B	S66646	A56046	S18582	S55002	S05033	JH0785	S57517	S26515	S47391	A60654	SPHO	S15594	JP0054	A42016
hementin (EC 3.4	angiotensin-conver	cardioacceleratory	urinary tract ston	hypothetical prote	protein 1 - Legion	photosystem II pro	DNA-directed RNA p		T-cell receptor al			substance P - hors	orf 1 rara 5'-regi	ribosomal protein	mammary-derived gr

ALIGNMENTS

Glu2,

Pro5-kassinin (hylambates-kassinin) and hylambatin,

Erspamer, G.F.; Erspamer,

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ribosomal protein L30 - Bacillus macerans (fragment)
C:Species: Bacillus macerans
C:Date: 10-Mar-1994 #sequence_revision 28-Oct-1994 #text_change 28-Oct-1994
C:Accession: JP0053
R:Ochi, K.
   В
                                            Query Match
Best Local Similarity
Tatches 5; Conserva
                                                                                                                             A; Molecule type: protein
A; Residues: 1-20 <OCH>
C; Keywords: protein biosynthesis; ribosome
                                                                                                                                                                        submitted to JIPID, February 1994
A;Description: Phylogenetic diversity in the genus Bacillus and comparative ribosomal A;Reference number: JP0042
A;Accession: JP0053
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
    7
                           2 MVKFLFPRPDQQHS 15
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Pred. No. 2.5e+02;
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1; Mismatches 0;
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Biochem. Biophys. Res. Commun. 178, 526-530, 1991
A, Title: Primary structures of the bombesin-like neuropeptides
A, Reference number: PQ0177; MUID:91315477
A, Accession: PS0221
A, Molecule type: Protein
A, Residues: 1-15 <CON>
A, Experimental source: brain
C; Keywords: neuropeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Schadendorf, D.; Yamaguchi, H.; Old, L.J.; Srivastava, P.K.
J. Immunol. 142, 1621-1625, 1989
A;Title: A novel heteromorphic human cell surface alloantigen, gp60, defined by A;Reference number: A60770; MUID:89140352
A;Accession: A60770
A;Molecule type: protein
A;Mesidues: 1-14 <SCH>
C;Comment: This protein is an alloantigen in human populations but is not found C;Comment: This protein exists in both membrane bound and cytosolic forms.
C;Keywords: glycoprotein; polymorphism; surface antigen
                                                                                                                                                                                                            gastrin-releasing peptide - laughing frog (fragment)
C;SpecLes: Rana ridibunda (laughing frog)
C;Date: 23-Nov-1991 #sequence_revision 23-Nov-1991 #text_change 03-Mar-1995
C;Accession: PS0221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Species: Homo sapiens (man)
C;Date: 14-May-1993 #sequence_revision 14-May-1993 #text_change 07-Feb-1997
C;Accession: A60770
R;Schadendorf, D.; Yamaguchi, H.; Old, L.J.; Srivastava, P.K.
J. Immunol. 142, 1621-1625, 1989
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J. Biol. Chem. 269, 14103-14110, 1994 J. Biol. Chem. 269, 14103-14110, 1994 A:Title: Schizosaccharomyces pombe fatty acid synthase mediates DNA strand e A:Accession: A54083 MUID:94245730 A:Accession: A54083 A:Status: preliminary
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Best Local Similarity
"hes 4; Conserv
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A;Residues: 1-20 <KAS>
A;Note: sequence extracted from NCBI backbone
C;Superfamily: yeast fatty-acid synthase
                                                                                                                                                                                    R; Conlon, J.M.; O'Harte, F.; Vaudry,
                                                                                                                                                                                                                                                                                                                                                                                                      В
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Pred. No.
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Pred. No. 3.7e+02;
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substance P - Atlantic cod
C;Species: Gadus morhua (Atlantic cod)
C;Date: 19-Mar-1997 #sequence_revision
C;Accession: $23306
R;Jensen, J.; Conlon, J.M.
                                                                                                                                                             RESULT
S23306
                               Eur. J. Biochem. 206, 659-664, 1992
A; Title: Substance-P-related and ne
A; Reference number: S23186; MUID:92
                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
"-+ chas 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                     C;Superfamily: substance P precursor C;Keywords: amidated carboxyl end; tachykinin F;11/Modified site: amidated carboxyl end (Me
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Gallus gallus (chicken)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 11-Jul-1997
C;Accession: JN0023
                A; Reference number: A; Accession: S23306
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Conlon, J.M.; Katsoulis, S.; Schmidt, W.E.; Thim, L. Regul. Pept. 20, 171-180, 1918 A;Title: [Arg3]substance P and neurokinin A from chicken A;Reference number: JN0023; MUID:88204263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Osada, T.; Sasaki, T.; Ikai, A.
J. Biochem. 103, 212-217, 1988
A;Title: Purification and characterization
A;Reference number: A41436; MUID:88227890
A;Accession: A41436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         alpha-macroglobulin - green seaturtle (fragment)
C:Species: Chelonia mydas (green seaturtle)
C:Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 18-Jun-1993
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A; Residues: 1-15
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A; Molecule type: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       substance P - chicken
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Pred. No. 4e+02;
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No.
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4e+02;
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                                                                                                           #text_change 01-Feb-1999
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avenin gamma-4 - oat (fragment)
N;Alternate names: CIP-1; coeliac immunoreactive protein
C;Species: Avena sativa (oat)
C;Date: 19-Mar-1997 #sequence_revision 24-Jul-1998 #text
C;Accession: S29207
                                                                                                                                                                                                                           C;Accession: S29207

R;Rocher, A.; Colilla, F.; Ortiz, M.L.; Mendez, E.

FBBS Lett. 310, 37-40, 1992

A;Title: Identification of the three major coeliac immunoreactive proteins and one alpha A;Reference number: S29207; MUID:92405739

A;Accession: S29207
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                                                                                                                                               A; Experimental source: endosperm C; Superfamily: gliadin C; Keywords: prolamin; seed
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S29207
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Best Local Similarity
"~ hes 5; Conserv
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A;Description: Human HLA-A0201 restricted recognition of influenza
A;Reference number: $47355
A;Accession: $47395
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S47395
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A; Residues: 1-12 <LEH>
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A; Experimental source: brain
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Best Local :
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Pred. No. 5
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Pred. No. 4.2e+02;
0; Mismatches 1;
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5.9e+02;
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globin - polychaete (Euuis-J.... C;Species: Eudistylia vancouveri C;Species: Eudistylia vancouveri C;Date: 19-Mar-1997 #sequence_revision 10-Oct-1997 #text_change 05-Dec-1998 C;Accession: S19613 C;Accession: S19613
A; Experimental source: plume C; Complex: dodecamers, each consisting of a trimer of tetramers of C; Keywords: calcium; dodecamer; heme; homotetramer; oxygen carrier
                                                         R;Qabar, A.N.; Stern, M.S.; Walz, D.A.; Cl
J. Mol. Biol. 222, 1109-1129, 1991
A;Title: Hierarchy of globin complexes. Th
A;Reference number: S19532; MUID:92106333
A;Accession: S19613
A;Mclecule type: protein
A;Residues: 1-19 <QAB>
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A28965
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A;Accession: A28965
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Pred. No. 5.96
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Pred. No. 6.7e+02;
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ferredoxin b - Japanese radish (fragments)
C;Species: Kaiware daikon (Japanese radish)
C;Species: Kaiware daikon (Japanese radish)
C;Date: 10-Mar-1998 #sequence_revision 10-Mar-1998 #text_change 17-Apr-1998
C;Accession: S6916
R;Obata, S.; Nishimura, M.; Nagai, K.; Sakihama, N.; Shin, M.
Arch. Biochem. Biophys. 316, 797-802, 1995
A;Reference number: S69164; MJD:95168867
A;Reference number: S69164; MJD:95168867
A;Recession: S69166
A;Mcolecule type: protein
A;Residues: 1-19 <OBA>
C;Reywords: 2Fe-2S; electron transfer; iron-sulfur protein
                                                                                                                                                                                                                                                                         RESULT 15
JP0055
C:Species: Bacillus polymyxa (fragment)
C:Species: Bacillus polymyxa
C:Species: Bacillus polymyxa
C:Date: 10-Mar-1994 #sequence_revision 28-Oct-1994 #text_change 28-Oct-1994
C:Cochi, K.
Submitted to JIPID, February 1994
A:Description: Phylogenetic diversity in the genus Bacillus and comparative ribosomal pr
A:Reference number: JP0042
A:Accession: JP0055
A:Molecule type: protein
A:Residues: 1-20 <CCH>
C:Reywords: protein biosynthesis; ribosome
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S69166
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Search completed: December 21, 2000, 08:30:08 Job time: 272 sec
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Best Local Similarity 71.4
Matches 5; Conservative
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Best Local Similarity 28.6%;
Matches 4; Conservative
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71.4%;
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1; Mismatches 1.
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Pred. No. 7.6e+02;
4; Mismatches 6;
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TKNA_CHIGK
TKNA_GADMO
GALS_SALTY
HELFI-HELHO
TKNA_ONCMY
TKNA_ONCMY
TKNA_SCYCA
TKN1_PSEGU
TKN2_PSEGU
TKN2_PSEGU
TKN2_PSEGU
TKN4_PSEGU
 OXLA_OPHHA
ACPH_BOVIN
LEC3_ARTIN
PAP2_PARMA
FARP_LOCMI
BPP3_BOTIN
BPP3_BOTIN
BPPB_AGKHA
TKN2_KASMA
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equus cabal
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synechococc
ascaris suu
bothrops ja
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9 trachemys s
0 gallus gall
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5 salmonella
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	P17237 icaria sp.		P80155 theromyzon					P80410 palomena pr			P28525 hordeum vul	P08611 kassina sen

ALIGNMENTS

	RESULT ALB2_T ID A	Qy Db	Qu Be Ma	DR DR FT	306	G C C C E :	RP RT RT	80000000000000000000000000000000000000	RESULT TKN1_K ID T
15-JUL-1998 (Rel. 36, Created) 15-JUL-1998 (Rel. 36, Last sequence update) 15-JUL-1999 (Rel. 38, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation update) 68 KDA SERUM ALBUMIN (ALB-2) (FRAGMENT). Trachemys scripta (Red-eared slider turtle) (Pseudemys scripta). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Testudines; Cryptodira; Testudinoidea; Emydidae; Trachemys. SEQUENCE. MEDLINE; 98103404. BIOWN M.A., Chambers G.K., Licht P.;	LT 2 _TRASC STANDARD; PRT; 15 AA. PB1189:	8 PRPDQ 12 : 3 PKPDQ 7	Query Match 25.2%; Score 27; DB 1; Length 12; Best Local Similarity 80.0%; Pred. No. 69; Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps	INTERPRO; IPRO02040; INTERPRO; IPRO02040; PROSITE; PS00267; TACHYKININ; 1. PROSITE; PS00267; TACHYKININ; 1. Tachykinin; Neuropeptide; Amidation; Amphibian skin. MOD_RES 12 AMIDATION. SEQUENCE 12 AA; 1376 MW; 3E756D279DD6DAB7 CRC64;	- PINISTARITY: BELONGS TO THE TACHYKININ FAMILY. DID. CIONGO	Biomed. Res. 2:613-617(1981).	SEQUENCE. SEQUENCE. Yasuhara T., Nakajima T., Erspamer G.F., Erspamer V.; Yasuhara T., Nakajima T., Erspamer G.F., Erspamer V.; "New tachykinins, Glu2, Pro5-kassinin (hylambates-kassinin) and hylambatin, in the skin of the African rhacophorid frog Hylambates maculatus":	01-AUG-1988 (Rel. 08, Created) 01-AUG-1988 (Rel. 08, Last sequence update) 30-ANG-1988 (Rel. 08, Last sequence update) 30-ANG-1988 (Rel. 08, Last sequence update) 40-ANG-1988 (Rel. 39, Last annotation update) 41-ANBATES KASSININ (GLU(2)-PRO(5) KASSININ). 41-ANBATES KASSININ (GLU(2)-PRO(5) KASSININ). 41-ANGENTAL METAZOA; Chordata; Craniata; Vertebrata; Euteleostomi; 41-ANGENTAL METAZOA; Chordata; Craniata; Vertebrata; Euteleostomi; 41-ANGENTAL METAZOA; Anura; Neobatrachia; Ranoidea; Hyperoliidae; 41-ANGENTAL METAZOA; ANGENTAL METAZOA;	ILT 1 _KASMA TANDARD; PRT; 12 AA.

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Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata;
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01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHICK
                                                                                                                                                                              Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
MOD_RES 11 11 AMIDATION.
SEQUENCE 11 AA; 1377 MW; 21487FE3C9D6C6C7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BINDING CAPACITY FOR WATER, CA++, NA+, K+, FATT BILLRUBIN AND DRUGS. ITS MAIN FUNCTION IS THE I COLLOIDAL OSMOTIC PRESSURE OF BLOOD.

-I- SUBCELLULAR LOCATION: EXTRACELLULAR.
-I- TISSUE SPECIFICITY: PLASMA.
-I- MISCELLANEOUS: IN THE RED-EARED SLIDER TURTLE,
OF ALBUMIN, ALB-1 AND ALB-2.
-I- SIMILARITY: BELONGS TO THE ALB/AFP/VDB FAMILY.
TUPEDEDED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Comp.
                                                                                                                                                                                                                      PIR; JN0023; JN0023.
INTERPRO; IPR002040; -.
PROSITE; PS00267; TACHYKININ; 1.
                                                                                                                                                                                                                                                                  ESSUE-INLESSALICE, ISSUE-INLESSALICE, B8204263.

EDLINE; 88204263.

Onlon J.M., Katsoulis S., Schmidt W.E., Thim L.;

(Arg3]substance P and neurokinin A from chicken smallegul. Pept. 20:171-180(1988).

-I- FUNCTION: TACHYKININS ARE ACTIVE PEPTIDES WHICH-
EVOKE BEHAVIORAL RESPONSES, ARE POTENT VASODILAT
                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE.
TISSUE=INTESTINE;
                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INTERPRO; IPRO00264; -. PROSITE; PS00212; ALBUMIN; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Purification and par
albumins from turtle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TKNA_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
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                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         asma; Metal-binding; Lipid-binding; Albumin.
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                                                                     PRPQQ
                                                                                      PRPDQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DETHTLGHXF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 AA; 1733 MW;
                                                                      9
                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              partial amino acid sequences tle plasma.";
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80
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                                                                                                                                  . 4 %;
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                                                                                                                                                                                                                                                       THE TACHYKININ FAMILY
                                                                                                                      0,
                                                                                                                                 Score 24;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THE MAIN PROTEIN OF PLASMA, HAS A GOOD ER, CA++, NA+, K+, FATTY ACIDS, HORMONES, MAIN FUNCTION IS THE REGULATION OF THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 1.90
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4B7422B89FF73223 CRC64;
          PRT;
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                                                                                                                       Mismatches
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                                                                                                                                                                                                                                                                                 OR INDIRECTLY)
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                                                                                                                                             Length 11;
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                                                                                                                                                                                                                                                                                                                                 small intestine.";
                                                                                                                      Indels
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RESULT
GALS_SI
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Best Local Similarity
Matches 4; Conser
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01-FEB-1995
01-FEB-1995
                                                                     MOL. Gen. Genet. 214:5/y-30/(1500).

-I- FUNCTION: REPRESSOR OF THE MGL OPERON. BINDS GALACTOSE AND D-FUCOSE AS INDUCERS. GALS BINDS TO AN OPERATOR DNA SEQUENCE WITHIN ITS OWN CODING SEQUENCE (BY SIMILARITY).

-i- SIMILARITY: BELONGS TO THE LACI FAMILY OF TRANSCRIPTIONAL
                                                                                                                                                                                                                                                                                                                                                                                 LT 5
SALTY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-DEC-1992
01-DEC-1992
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                       GALS_SALTY
P41030;
 Transcription regulation;
NON_TER 1 1
SEQUENCE 18 AA; 2133 M
                                                                                                                                       Benner-Luger D., Boos W.;
"The mglB sequence of Salmonella typhimurium LT
by gene fusions and evidence for a divergently
for the mgl repressor.";
Mol. Gen. Genet. 214:579-587(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INTERPRO; IPR002040; -
PROSITE; PS00267; TACHYKININ;
PROSITE; PS00267; TACHYKININ;
TACHYKININ; Neuropeptide; Amic
MOD_RES 11 11 1
SEQUENCE 11 AA; 1315 MW; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebi
Actinopterygii; Neopterygii; Teleostei; Euteleo
Acanthomorpha; Paracanthopterygii; Gadiformes;
                                                                                                                                                                                                                                                                              Salmonella
                                                                                                                                                                                                                                                                                             GALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUR. J. Blochem. 206:659-664(1992).
-!- FUNCTION: TACHYKININS ARE ACTIVE PEPTIDES
EVOKE BEHAVIORAL RESPONSES, ARE POTENT VAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Substance-P-related and neurokinin-A-related of the cod and trout.";
                                    INTERPRO; IPR000843; -.
PROSITE; PS00356; HTH_LACI_FAMILY;
                                                              STYGENE; SG10521; GALS.
                                                                                                                                                                                                    MEDLINE; 89112167.
                                                                                                                                                                                                                   STRAIN-LT2;
                                                                                                                                                                                                                              SEQUENCE FROM
                                                                                                                                                                                                                                                         Salmonella.
                                                                                                                                                                                                                                                                    Bacteria;
                                                                                                                                                                                                                                                                                                        MGL REPRESSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 92298992.
Jensen J., Conlon J.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gadus morhua (Atlantic cod).
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Proteobacteria;
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(Rel. 31, Last sequence update)
(Rel. 31, Last annotation update)
OR AND GALACTOSE ULTRAINDUCTION FACTOR (FRAGMENT).
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(Rel.
(Rel.
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39,
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  ¥.
                        DNA-binding;
                                                                                                                                                                                                                                                                  gamma
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AMIDATION (BY SIMILARITY).
W; 214860D759D6C6C7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 24; DB : Pred. No. 2.1e. 0; Mismatches
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74A77150FA49FB8B CRC64
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                                      PARTIAL
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2.1e+02;
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                        Repressor
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Euteleostei; Neoteleostei;
formes; Gadoidei; Gadidae;
                                                                                                                                                                                                                                                                                                                                                                    AA.
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                                                                                                                                                               LT2; promoter
ly oriented ger
                                                                                                                                                                                                                                                                   Enterobacteriaceae;
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gene coding
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Query Match

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Score

24;

DB 1;

Length 18;

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HELT_HE
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Best Local
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01-DEC-1992 (Rel. 2
01-DEC-1992 (Rel. 2
30-MAY-2000 (Rel. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LHELHO
9
                                             of the
Eur. J.
                                                                                                                                        Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri) Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E Actinopterygii; Meopterygii; Teleostei; Euteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Oncor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mochca-Morales J., Martin B.M., Possani L.D.;
"Isolation and characterization of helothermine,
"leolderma horridum horridum (Mexican beaded lizar
Toxicon 28:299-399(1990).

-!- FUNCTION: TOXIC TO MICE; INDUCES LETHARGY, PA
REAR LIMBS AND LOMERING OF BODY TEMPERATURE,
                                                              Jensen J., Conlon J.M.;
"Substance-P-related and neurokinin-A-related of the cod and trout.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HELT_HELHO P46693;
                                                                                                 MEDLINE; 92298992.
                                                                                                             TISSUE-BRAIN;
                                                                                                                        SEQUENCE
                                                                                                                                                                                       SUBSTANCE P.
                                                                                                                                                                                                                                             TKNA_ONCMY
                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-VENOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Heloderma horridum horridum (Mexican beaded lizard).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Helodermatidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1995 (Rel. 32, Cr
01-NOV-1995 (Rel. 32, La
01-NOV-1995 (Rel. 32, La
HELOTHERMINE (FRAGMENT).
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3 RRHSVAW 9
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MISCELLANEOUS: THE COMPLETE F
AND A PI OF 6.8.
                      . J. Blochem. 206:659-664(1992). FUNCTION: TACHYKINING ARE ACTIVE EVOKE BEHAVIORAL RESPONSES, ARE P SECRETAGOGUES, AND CONTRACT (DIRE
  MUSCLES.
SIMILARITY:
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0 AA;
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  BELONGS
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32, Last sequence up
32, Last annotation
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2156
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Pred. No. 4e+02;
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TACHYKININ
                               ARE POTENT VASODILATORS AND
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                      (DIRECTLY
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                       о<sub>к</sub>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mine, a novel toxin
lizard) venom.";
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                      INDIRECTLY)
                                                                          peptides
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                                 AND
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                                          NEURONS
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                       SMOOTH
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RESULT 9
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Best Local S
Matches 4
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Best Local
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Scyliorhinus canicula
Eukaryota; Metazoa; C
Elasmobranchii; Galec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-FEB-1995
01-FEB-1995
30-MAY-2000
       01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
KASSININ-LIKE PEPTIDE K-I (PG-KI).
Pseudophryne guentheri (Frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertel
Amphibia; Batrachia; Anura; Neobatrachia; Buf.
Pseudophryne.
                                                                                                                                                                                                                                                                                                         INTERPRO;
PROSITE; F
                                                                                                  TKN1_PSEGU
P42986;
                                                                                                                                                                                                                                                                       Tachykinin; Neuropeptide; Amidation; Neurotransmitter. MOD_RES 11 11 AMIDATION. SEQUENCE 11 AA; 1278 MW; 214860DEC9D6D867 CRC64;
                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 93292508.
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MOD_RES 11 11 AMIDATION (BY SIMILARITY)
SEQUENCE 11 AA; 1358 MW; 214860DEC9D6D1F7 CRC64;
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PIR; S23308; S23308.
INTERPRO; IPRO02040; -.
PROSITE; PS00267; TACHYKININ; 1.
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etazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
ii, Galeonorphii, Galeoidea; Carcharhiniformes;
ae; Scyllorhinus.
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                   neobatrachia; Bufonoidea;
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01-NOV-1995
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TISSUE=SKIN;
MEDLINE; 902
                                                                                                                                                                                                                                                                                                                                                                                                                Simmaco M., Severini C., de Biase D., Barra D., Bossa F., Roberts J.D., Melchiorri P., Erspamer V.;
"Six novel tachykinin and bombesin-related peptides from the Australian frog Pseudophryne guntheri.";
Peptides I1:299-304(1990).
Peptides I1:299-304(1990).
Peptides BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND EVOKE BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND
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01-NOV-1995 (Rel. 32, Last sequence up
30-MAY-2000 (Rel. 39, Last annotation
KASSININ-LIKE PEPTIDE K-II (PG-KII).
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                                                                                                                                                                                                                                                                     Tachykinin; Neuropeptide;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachi
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4.5e+02;
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RESULT 12
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SEQUENCE.

MEDLINE; 91027757.

MEDLINE; 91027757.

Lazard D., Tal N., Rubinstein M., Khen M., Lancet D., Zupac ...

Identification and blochemical analysis of novel olfactory-specificytochrome p-450IIA and UDp-glucuronosyl transferase.";

Biochemistry 29,7433-7440(1990)

FINCTION: CYTOCHROMES p450 ARE A GROUP OF HEME-THIOLATE

OF FUNCTION: CYTOCHROMES P450 ARE A GROUP OF HEME-THIOLATE

TOWNORYGENASES. IN LIVER MICROSOMES, THIS ENZYME IS INVOLVED

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CPAX_BOVIN STANDARD; PRT; 18 AA. P22779; 01-AUG-1991 (Rel. 19, Created) 01-AUG-1991 (Rel. 19, Last sequence update) 15-DEC-1998 (Rel. 37, Last annotation update) 15-DEC-1998 (Rel. 37, Last annotation update) 01-AUG-1998 (Rel. 37, Last annotation update
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
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Mammalia; Eutheria;
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                             MONOOXYGENASES. IN LIVER MICROSOMES, THIS ENZYME IS INV
NADPH-DEPENDENT ELECTRON TRANSPORT PATHWAY. IT OXIDIZES
OF STRUCTURALLY UNRELATED COMPOUNDS, INCLUDING STEROIDS
ACIDS, AND XENOBIOTICS.
CATALYTIC ACTIVITY: RH + REDUCED FLAVOPROTEIN + O(2) =
OXIDIZED FLAVOPROTEIN + H(2)O.
SUBCELLULAR LOCATION: MEMBRANE-BOUND. ENDOPLASMIC RETICULUM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bovinae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bos.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chordata; Craniata; Vertebrata; Euteleostomi;
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PYRROLIDONE CARBOXYLIC
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1; Mismatches
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3A247C2CC9CB1AB7
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                                                                                                                                                                                                                                                                                                        D., Zupko K.;
olfactory-specific
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UPA3_HUMAN
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Best Local Similarity
Matches 4; Conserv
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Best Local Similarity 66.
Matches 4; Conservative
                                                                                                                                                                     21-JUL-1986
21-JUL-1986
30-MAY-2000
SUBSTANCE P.
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NON_TER
SEQUENCE
                                          Equus caballus (Horse), and Cavia porcellus (Guinea
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NON_TER
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Electrophoresis 13:707-714(1992).
-i- MISCELLANEOUS: ON THE 2D-CEL THE DETERMINED PI OF PROTEIN IS: 4.6, ITS MW IS: 46 KDA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 93092937.
Hughes G.J., Frutiger S., Paquet Sanchez J.-C., James R., Tissot Hochstrasser D.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-1993 (Rel. 25, Created)
01-APR-1993 (Rel. 25, Last sequence update)
01-APR-1993 (Rel. 25, Last annotation update)
UNKNOWN PROTEIN FROM 2D-PAGE OF PLASMA (SPOT
                                                                                                                                       TAC1 OR NKNA OR TAC2 OR NKA.
                                                                                                                                                                                                                                                                                     TKNA_HORSE
P01290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human)
Eukaryota; Metazoa;
   SEQUENCE
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                                                                                                                                                                                              (Rel. 01, Created)
(Rel. 01, Last seq.
(Rel. 39, Last ann
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onooxygenase; Electron transport;
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Primates;
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Pred. No. 7.8e+02;
0; Mismatches 2;
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Pred. No. 8.8e+04;
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Best Local
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Best Local
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                                   Matches
                                                                                                                                                                                                                                                                                   LYMDI
                                                                                                                                                                                                                         ECDE_LYMDI STANDARD; PRT; P80941; P90941; 15-JUL-1998 (Rel. 36, Created) 15-JUL-1998 (Rel. 36, Last sequence up 15-JUL-1998 (Rel. 36, Last annotation TESTIS ECDYSIOTROPIN PEPTIDE E (TE).
                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE, PS00267; TACHYKININ; 1.
                                                                              Tachykinin; Neuropeptide; Amidation; MOD_RES 11 11 AMIDATION SEQUENCE 11 AA; 1349 MW; 3E757FE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Primary amino acid sequence of guinea-pig substance P.";
Neuropeptides 14:105-110(1989).

-i- FUNCTION: TACHYKININS ARE ACTIVE PEPTIDES WHICH EXCITE NEURONS,
EVOKE BEHAVIORAL RESPONSES, ARE POTENT VASODILATORS AND
SECRETAGOGUES, AND CONTRACT (DIRECTLY OR INDIRECTLY) MANY SMOOTH
                                                                                                                                    Loeb M.J., Wagner R.M., Woods Bell R.A.;
                                                                                                                                                               SEQUENCE.
TISSUE=BRAIN;
                                                                                                                                                                                               Lymantria dispar (Gypsy moth).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SPECIES=C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Helv. Chim.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SPECIES-HORSE;
Studer R.O., Trzeciak A.,
"Isolation and amino-acid
intestine.";
                                                                                                                                                     MEDLINE;
                                                                                                                                                                                          Noctuoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE;
5
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                 PRPDQQHS
                                                                                                                                                                                                                                                                                                                       PKPQQ
PNPDTPDS
                                   Similarity
4; Conserv
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3; Conserv
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                                                                                                                                                                                         Lymantriidae;
                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                        Lymantria
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Pred.
1; Mis
                                  Score 21; DB Pred. No. 8.16 0; Mismatches
                                   0
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3E757FE3C9D6C6C7
                                                                                                                                            C.W., Gelman D.
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6.8e+02;
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                                          1e+02;
                                                                                                                                           .G., Harrison
                                                                                                                                                                                                                                                                                                                                                                                                      CRC64;
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Search completed: Job time: 443 sec

December

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Page 6

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Result
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Perfect score:
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        protein search, using
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1: sp_archea:*
2: sp_bacteria
3: sp_fung1:*
4: sp_human:*
5: sp_human:*
5: sp_mammal:*
7: sp_mhc:*
8: sp_organel:
9: sp_phage:*
10: sp_plant:*
11: sp_rotest:
12: sp_vrus:*
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14: sp_unclass
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sp_virus:*
sp_vertebrate:*
sp_unclassified:*
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11.880 Million cell updates/sec
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Q9w9u12 sinian
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Q73461 human
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Q06800;
Q1-NOV-1996
Q1-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                 Nasr F., Becam A.M., Herbert C.J.;
"The sequence of 36.8 kb from the left arm of chromosome XIV reveals
24 complete open reading frames: 18 correspond to new genes, one of
which encodes a protein similar to the human myotonic dystrophy
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 96287653.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycetes; Saccharomycetales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Saccharomycetaceae;
                                                                                                                                                                                                                                                                                                                                                       kinase.";
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G (TrEMBLrel.)
G (TrEMBLrel.)

01,

Created)
Last sequence update)
Last annotation update)

Saccharomyces.

PRELIMINARY;

PRT;

17 B

		44	4 ω	42	41	40	39	38	37	36	ω 5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	
	27	27	27	27	27	27	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	
	5	5	5	5	5	25.2	6	6.	6.	7.	7	7.	7.	.7	7.	7.	7.	7.	7	7.	7.	7.	7.	7	7.	7.	
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i	073541	Q73539	Q73537	Q73535	Q73533	Q73531	090625	Q79458	089818	Q73529	Q73527	Q73525	Q73521	Q73519	Q73515	Q73513	Q73511	Q73509	Q73507	Q73505	Q73503	Q73501	Q73499	Q73497	Q73495	Q73493	
ı	073541	073539	Q73537	Q73535	Q73533	Q73531 h	090625	Q79458	089818	Q73529	Q73527	Q73525	Q73521	Q73519	Q73515	Q73513	Q73511	Q73509	Q73507	Q73505	Q73503	Q73501	Q73499	1.1	Q73495	1.1	
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ALIGNMENTS

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RESULT
Q73487
ID Q
AC Q
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Best Local S
Matches 6
073487

073487;

073487;

01-NOV-1996 (TrEMBLrel. 01, Created)

01-NOV-1996 (TrEMBLrel. 01, Last sequence update)

01-NOV-1996 (TrEMBLrel. 08, Last annotation update)

REVERSE TRANSCRIPTASE (FRAGMENT).
                                                                                                                                                                                                                                                              Yeast 12:169-175(1996).
EMBL; X92517; CAA63292.1; -.
SEQUENCE 17 AA; 2139 MW;
                                                                                                                                                                               12 QQHSVAYT 19
                                                                                                                                                       3 QQHSVCFT 10
                                                                                                                                                                                                     Similarity 6; Conserv
                                                                                                                                                                                                       Conservative
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75
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                                                                                                                                                                                                                                                               BD7E9AAFADF754AF CRC64;
                                                                                                                                                                                                                DB
27;
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                                                                                                                                                                                                     Indels
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RESULT
Q9WLD2
ID Q9
AC Q9
DT 01
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Best Local Similarity
Thehes 5; Conserv
                                                                                                                     Query Match
Best Local S
Matches 6
                                                                                                                                                                            J. Virol. 0:0-0(1998) which are 1 EMBL; AF082804; AAC34447.1; -. EMBL; AF082812; AAC34111.1; -. EMBL; AF082813; AAC34114.1; -. EMBL; AF082814; AAC34117.1; -. NON_TER 1
      Q9WLD2;
Q9WLD2;
01-NOV-1999
                                                                                                                                                                                                                                     STRAIN LOUZU, ....
Eberle R., Smith A., Black D.;
"Molecular evidence for distinct genotypes
"Molecular evidence which are related to
                                                                                                                                                                                                                                                                                                                                           01-NOV-1999 (TrEMBLrel. 12, 01-NOV-1999 (TrEMBLrel. 12, 01-NOV-1999 (TrEMBLrel. 12, GLYCOPROTEIN G (FRAGMENT).
                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                             Simian herpes B virus (Cercopithecid h
Viruses; dsDNA viruses, no RNA stage;
                                                                                                                                                                                                                                                                                                                                                                                     Q9W9U1;
                                                                                                                                                                                                                                                                                                                                                                                                 Q9W9U1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Leigh Brown A.J.;
Submitted (JAN-1996) to ti
EMBL; U45053; AAB04204.1;
                                                                                                                                                                                                                                                                       STRAIN-20620,
                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. STRAIN=PATIENT P74; MEDLINE; 96242958.
                                                                                                                                                                                                                                                                                                      Alphaherpesvirinae; Simplexvirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U45053; AAB04204.1; -. RNA-directed DNA polymerase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NON_TER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cleland A., Watson H.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viruses;
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus type
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                                                                              RSPSQHRVRYT
                                                                                                 RPDQQHSVAYT
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                                                                                                                     Similarity 54. 6; Conservative
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       (TrEMBLrel.
                           PRELIMINARY;
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                                                                                                                                                                       AA;
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                                                                                                                                                                      2220 MW; E585178F064B278B CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Retroviridae;
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Last annotation updat
      Created)
                                                                                                                   Score 30; DB Pred. No. 1.5e 0; Mismatches
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Pred. No.
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                           PRT;
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63;
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                                                                                                                                                                                                                                                                Cleland A., Watson H.G., Robertson P., Ludlam C.A., Brown A.J.; "Evolution of zidovudine resistance-associated genotypes in hum: immunodeficiency virus type 1-infected patients."; J. Acquir. Immune Defic. Syndr. Hum. Retrovirol. 12:6-18(1996).
                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. STRAIN=PATIENT P74; MEDLINE; 96242958.
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                                                                                                                        Submitted (JAN-1996) to the EMBL; U45035; AAB04186.1; -.
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Cleland A., Watson H.G., Re "Evolution of zidovudine rimmunodeficiency virus typinmunodeficiency virus typinmune Defic. S
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Submitted (JAN-1996) to
EMBL; U45041; AAB04192.1
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Cleland A.,
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c. Syndr. Hum. Retrovirol. 12:6-18(1996).
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MEDLINE; 96242958.
Cleland A., Watson H.G.,
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Leigh Brown A.J.;
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Viruses; Retroid viruses; Retroviridae; Lentivirus
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Submitted (JAN-1996) to the
EMBL; U45043; AAB04194.1; -.
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Pred. No. 2e+02;
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                                                                                                                                                                    DB 12;
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Matches 4
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SEQUENCE
                                                                                                                                                                                                              Cleland A., Watson H.G., Robertson P., Ludlam C.A., Brown A.J.; "Evolution of zidovudine resistance-associated genotypes in human immunodeficiency virus type 1-infected patients."; J. Acquir. Immune Defic. Syndr. Hum. Retrovirol. 12:6-18(1996).
                                                                                                                                               Leigh Brown A.J.;
Submitted (JAN-1996) to the
EMBL; U45047; AAB04198.1; -
                                                                                                                                                                                STRAIN-PATIENT P74;
                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                              MEDLINE; 96242958.
                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. STRAIN=PATIENT P74;
                                                                                                                                                                                                                                                                                                 Viruses; Retroid viruses; Retroviridae; Lentivirus.
[1]
                                                                                                                         RNA-directed DNA polymerase.
N
                     N
LLRWGFTTPDKKH
                    MVKFLFPRPDQQH
                                          h 27.1%;
Similarity 30.8%;
4; Conservative
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14
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                                                                                                    2219 MW;
                                          Score 29; DB
Pred. No. 2e+(
6; Mismatches
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                                                                                                    B36910F4583BBFFE CRC64;
                                                      DB 12;
2e+02;
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Search completed: December 21, 2000, 08:35:40 Job time: 603 sec

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Result
No.
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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            length: 0 length: 22
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1: /cgn2_6/ptodata/2.

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5: /cgn2_6/ptodata/2.
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Query
Match
            164575 segs, 16761186 residues
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Gapop 10.0 , Gapext 0.5
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            US-08-940-095-13
US-08-940-095-13
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US-08-199-508-2
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US-08-484-530-22
US-08-483-952A-22
US-08-199-339A-401
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Sequence 133, App Sequence 133, App Sequence 22, Appli Sequence 401, App Sequence 134, App Sequence 10, Appli Sequence 10, Appli Sequence 10, Appli Sequence 10, Appli Sequence 11, Appli Sequence 12, Appli Sequence 12, Appli Sequence 13, Appli Sequence 17, Appli Sequence 17, Appli Sequence 47, Appli Sequence 51, Appli Sequence 51, Appli Sequence 6, Appli Sequence 13, Appli Sequence 13, Appli Sequence 52, Appli
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US-08-940-095-133
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	21, App1			21, Appl	•	25, Appl	29, Appl	-			5, Appli	-	36, Appl	~	1, Appli	•	1ddw /zc

ALIGNMENTS

TELEPHONE: 650-493-4935 TELEFAX: 650-493-5556
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US-08-940-096-133; Sequence 133, Application US/08940096; Patent No. 6046166
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                                                                   RESULT
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Thes 7; Conservative
       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 0091
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                      TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 22 amino acids
TYPE: amino acid
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APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
                                                                                                                                                                                                                                                                 MOLECULE TYPE: No. 6037323e
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                                                                                                                                                                                                                                                                                          STRANDEDNESS:
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CLASSIFICATION:
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                                                                                                                                         11 EHLLVDFLQSLS 22
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Cornut, Isabelle
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                                                                                                                                                                                     28.8%;
58.3%;
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58.3%;
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Pred. No. 33;
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US-08-199-508-2
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                                                                                                                                                                                                                                 Sequence 2, Application US/08199508 Patent No. 5717058
                                                                                                                                GENERAL INFORMATION:
APPLICANT: Matthews, Maura-Ann H.
APPLICANT: Stetler, Gary L.
APPLICANT: Anthony-Cahill, Spencer J.
APPLICANT: Anderson, David C.
TITLE OF INVENTION: Modulators of Gene Expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 650-493-5556
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
 COMPUTER READABLE FORM: MEDIUM TYPE: Diskette,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 530 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
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                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS
                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
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                                                            CITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                STATE: Colorado
ZIP: 80301
                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM CO
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                 11 EHLLVDFLQSLS 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 1155 A
                                                                           ADDRESSEE: Somatogen, Inc. STREET: 5797 Central Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 10036-2811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
                                                                                                                                                                                                                                                                                                                       7
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                                                           Boulder
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3.50 inch, 1.4 Mb storage
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TELECOMMUNICATION INFORMATION: TELEPHONE: 650-493-4935
TELEFAX: 650-493-5556
                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                        REGISTRATION NUMBER: 30, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Pennie a Lumun...
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Buttner, Klaus
Cornut, Isabelle
Metz, Gunther
                                                                                                                                                                                                                                                                                                                                                                                               FastSEQ Version 2.0
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                                                                                     No. 6046166e
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AND THEIR USE TO TREAT DYSLI
258
              28.8%;
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              Score 32;
Pred. No.
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  Mismatches
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                 DB 3;
33;
                           Length 22;
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Gaps
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US-08-399-696-85
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Best Local Similarity
"-*ches 5; Conserva
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; HYPOTHETICAL:
US-08-199-508-2
                            PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/156,671
FILING DATE: 22-NOV-193
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 15522-000710
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
TELEFAX: (415) 326-2422
INFORMATION FOR SEQ ID NO: 85:
SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acids
TYPE: amino acids
STRANDEDNESS: unknown
TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
MOLECULE TYPE: peptide -08-399-696-85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 303-444-3013
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 08/021,536
FILING DATE: February 23, 1993
ATTORNEY/AGENT INFORMATION:
NAME: No. 5717058ak, Henry P.
REGISTRATION NUMBER: 33200
                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
.TELEPHONE: 303-541-3322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/399,696 FILING DATE: 02-MAR-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
TOPOLOGY: unknown to applicant
DLECULE TYPE: peptide
(POTHETICAL: yes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 121 CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: Februa
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SOFTWARE: Microsoft Word 5.0a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: Apple Macintosh
OPERATING SYSTEM: System
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85, Application US/08399696
o. 5756669
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38.5%;
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Pred. No. 63;
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COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,530
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A-60780-8/RFT/MTK
TELECHONE: 415-781-1989
TELEPHONE: 415-781-1989
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
FENCENCE CHARACTERISTICS:
                                                                                                                                           RESULT 7
US-08-827-618A-22
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Best Local Similarity
Watches 5; Conserve
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US-08-484-530-22
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Best Local Similarity
Thes 5; Conserve
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Patent No.
                                                                                                            Sequence 22, Application US/08827618A Patent No. 5998366
           GENERAL INFORMATION:
APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L.
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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APPLICANT: Kaufman, Daniel L
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSE: Flehr, Hohbach, Test, Albritton & Herbert
STREET: Four Embarcadero Center, Suite 3400
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: sir
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ZIP: 94111-4187
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5. 5846740
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Pred. No.
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Pred. No.
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93;
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US/08/483,952A

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US-08-483-952A-22
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APPLICATION NUMBER: US 07/716,909
APPLICATION NUMBER: US 07/716,909
FILING DATE: 18-JUN-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/586,536
APPLICATION NUMBER: US 07/586,536
APPLICATION NUMBER: 21-SEP-1990
ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
REGISTRATION NUMBER: 31,801
                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Tobin, Allan J
APPLICANT: Erlander, Mark G
APPLICANT: Kaufman, Daniel L.
TITLE OF INVENTION: Cloned Glutamic Acid Decarboxylase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 415-398-3249 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/827,618A FILING DATE: 09-APR-1997 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
TELEFAX: 415-398-3249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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TOPOLOGY: 11
MOLECULE TYPE:
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              ZIP: 94111-4187

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert
STREET: Four Embarcadero Center, Suite 3400
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert STREET: Four Embarcadero Center, Suite 3400 CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/485,725 FILING DATE: 07-JUN-1995
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hes 5; Conserv
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                                                                                                                             COUNTRY:
                                                                                                                                                                    CITY: San Francisco
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5. 6011139
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milarity 50.0%;
Conservative
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SYSTEM: PC-DOS/MS-DOS
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Pred. No.
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; MOLECULE TYPE: peptide US-08-483-952A-22
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US-08-159-339A-401
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Best Local Similarity 50.0%;
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                  ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COmpatible
OPERATING SYSTEM: DOS
SOFTWARE: Faster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 31,801
REFERENCE/DOCKET NUMBER: A:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415,781-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: Trecartin, Richard F.
REGISTRATION NUMBER: 31,801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/586,536
FILING DATE: 21-SEP-1990
CLASSIFICATION: 536
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 536
PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
APPLICANT: Sette, Alessandro
APPLICANT: Celis, Esteban
            APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29-NOV-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
                                                                                                                   SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 07-JUN-CLASSIFICATION: 536
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CLASSIFICATION: """
                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
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TOPOLOGY: 11
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STATE: CA
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FILING DATE: 07-AUGAPPLICATION NUMBER:
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o. 6037135
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linear
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                                                                                                                                                                                                                                                                                                                                                Uses
: 1254
                                                                                                                                                                                                                                                                                                                                                                               HLA Binding peptides and Their
                                                                                                     US/08/159,339A
   US 08/027,746
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Pred. No. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ed. No. 93;
Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 134, Application US/08940095 Patent No. 6004925 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                           NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                   COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                             ZIP: 10036-2811
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A
REGISTRATION NUMBER: 30,
REFERENCE/DOCKET NUMBER:
                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: 11
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Buttner, Klaus APPLICANT: Cornut, Isabelle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
                                                          TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 05-MAK-1377
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
TELEFAX: 650 TELEFAX: 66141 PENNIE
                                                                                                                                                                                                                                                                                                                                    STATE: New York
                                                                                                                                                                             APPLICATION NUMBER: US/0 FILING DATE: 29-SEP-1997 CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                            TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (415) 576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9 FPEHLL 14
                                                                                                                                                                                                                                                                                                                                                                      E: Pennie & Edmonds LLP
1155 Avenue of the Americas
                                 650-493-5556
                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sekul, Renate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dasseux, Jean-Louis
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linear
                                             650-493-4935
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66.7%;
                                                                                 30,742
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                                                                           009196-0004-999
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TYPE: amino acids
TYPE: amino acid
STRANDEDNESS: single
TYPOLOGY: linear
MOLECULE TYPE: No. 6004925e
US-08-940-095-134
                                                                            ; TYPE: amino acid
; STRANDEDNESS: sing
; TOPOLOGY: linear
; MOLECULE TYPE: No. 6
US-08-940-093-134
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US-08-940-093-134
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                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: COFUZZI, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 0091:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
TELEPHONE: 650-493-5556
TELEPAX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 134:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 50.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
 Best Local Similarity Matches 6; Conserv
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                               Query Match
                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/940,0
FILING DATE: 29-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Buttner, Klaus APPLICANT: Cornut, Isabel APPLICANT: Metz, Gunther
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTY: New York
STATE: NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM CONTROL OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                     FILING DATE:
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10036-2811
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                                                                                                                                                         22 amino acids
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1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Buttner, Klaus
Cornut, Isabelle
   Conservative
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                                                                                               No. 6037323e
                                                                                                                           single
                25.2%;
50.0%;
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50.0%;
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                Score 28; DB 3;
Pred. No. 1.5e+02;
                                                                                                                                                                                                                                                                         009196-0006-999
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Pred. No. 1.5e+02
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Mismatches
                               Length 22;
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ERLLEDLLKALN 18

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RESULT 12
US-08-940-096-134
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NAME: CORUZZI, LAURA A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 009196-0005-999
REFERENCE/DOCKET NUMBER: 009196-0005-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-556
TELEEX: 66141 PENNIE
INFORMATION FOR SEO ID NO: 134:
INFORMATION FOR SEO ID NO: 134:
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                                                                                                                                                               RESULT 13
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GENERAL INFORMATION:
                                                                                                                                               US-08-765-783A-83
                                                                                          Sequence 83, Applicat Patent No. 5994524 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                              Query Match
Best Local :
                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Buttner, Klaus
APPLICANT: Cornut, Isabelle
APPLICANT: Metz, Gunther
TITLE OF INVENTION: APOLIPOPROTEIN A-I AGONISTS
TITLE OF INVENTION: AND THEIR USE TO TREAT DYSLIPIDEMIC DISORDERS
NUMBER OF SEQUENCES: 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/01 FILING DATE: 29-SEP-1997 CLASSIFICATION: 530 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 22 amino acids
                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
ZIP: 10036-2811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 1155 A. CITY: New York
               APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                 11 EHLLVDFLQSLS 22
                                                                                                                                                                                                                7 ERLLEDLLKALN 18
                                                                                                                                                                                                                                                                               l Similarity
6; Conserv
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                                                                                                               3, Application US/08765783A 5994524
                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
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Sekul, Renate
                                                                                                                                                                                                                                                                                Conservative
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Yamazaki, Tatsumi
                                                              Matsumoto, Yoshihiro
                                             Yamada, Yoshiki
                                                                                                                                                                                                                                                                                                                                                                                                  linear
                               Sato,
               Tsuchiya, Masayuki
                                                                                                                                                                                                                                                                                                                                                                                  No. 6046166e
                                                                                                                                                                                                                                                                                                                                                                                                                single
                                  Koh
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                                                                                                                                                                                                                                                                                                    Score 28; DB 3;
Pred. No. 1.5e+02;
                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                    3; Indels
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US-08-596-257A-10
                                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                Sequence 10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM COMPUTER: COMPUTER: DOS
OPERATING SYSTEM: DOS
SOFTWARE: FASTSED for Windows Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/765,783A
PTITING DATE: 07-MAR-1997
                                                                                                                                                                                                                              APPLICANT: KOSSMAN, Jens
APPLICANT: EMMERMANN, Michael
APPLICANT: VIRGIN, IVar
TITLE OF INVENTION: DEBRANCHING
TITLE OF INVENTION: CODING THEM
TITLE OF INVENTION: OF ANYLOPEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 20006-1888
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 07-MAR-CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEFAX: 202-822-0168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: Murashige, Kate H
REGISTRATION NUMBER: 29,
REFERENCE/DOCKET NUMBER:
            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 2000 Pen
CITY: Washington
STATE: DC
                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: MORRISON & FOERSTER
                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
CURRENT APPLICATION DATA:
                                                                                                                             STREET: 1180 AV
CITY: New York
STATE: NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
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                                                                                                                COUNTRY:
                                                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                  0, Application US/08596257A 6001628
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                                                                                                  10036-8403
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
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linear
                                                                                                                                                              E: Ostrolenk, Faber, Gerb & Soffen
1180 Avenue of the Americas
                                                                                                                  US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Reshaped Human Antibody to Interleukin-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24.3%;
                                                                                                                                                                                                                                 DEBRANCHING ENZYMES AND DNA SEQUENCES CODING THEM, SUITABLE FOR CHANGING THE DEGREE OF BRANCHING OF AMYLOPECTIN STARCH IN PLANTS
                                                                                                                                                                                                                       12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29,959
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Pred. No. 1.2e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 9;
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CURRENT APPLICATION NUMBER: US/08/860,339
CURRENT FILING DATE: 1997-11-25
EARLIER APPLICATION NUMBER: DE P4447387.7
EARLIER FILING DATE: 1994-12-22
NUMBER OF SEO ID NOS: 24
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 10
SEQ ID NO 10
LENGTH: 15
TYPE: PAT
ORGANISM: Solanum tuberosum
US-08-860-339-10
Search completed: December 21, 2000, 08:36:43 Job time: 387 sec
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US-08-596-257A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-860-339-10
                                                                                                                                                                         Query Match 24.3%;
Best Local Similarity 30.8%;
Matches 4; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (212) 382-0888
TELEX: 236925
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
STRANDENNESS:
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 24.3%;
Best Local Similarity 30.8%;
Matches 4; Conservative
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FILING DATE: 08 FEB-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE 4327165.0
FILING DATE: 09-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Mellman, Edward A.
REGISTRATION NUMBER: 24,735
REFERENCE/DOCKET NUMBER: P/951-118
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 382-0700
TELEFAX: 236925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: KOSSMANN, Jens
APPLICANT: Emmermann, Michael
APPLICANT: Emmermann, Michael
APPLICANT: Virgin, Ivar
APPLICANT: Renz, Andreas
TITLE OF INVENTION: DNA MOLECULES CODING FOR DEBRANCHING ENZYMES DERIVED
TITLE OF INVENTION: FROM PLANTS
FILE REFERENCE: AGREVO-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: solanum tuberosum
                                                                                           1 LEQTNYGLPQQVI 13
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Pred. No. 1.4e+02;
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Pred. No. 1.4e+02;
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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   PIR_65:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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 BLOSUM62
Gapop 10.0 , Gapext 0.5
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Copyright (c) 1993 - 2000 Compugen Ltd.
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A32504
A32504
S59492
S71306
F371306
B61597
S03879
A01250
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B31769
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angiotensin I prec
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glutathione transf
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serum amyloid

RESULT

RESULT 2 A32521 hexokinase (EC 2.7.1.1) I peptide III - rat (fragment) C;Species: Rattus norvegicus (Norway rat) C;Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #te C;Accession: A32521 R;Schirch, D.M.; Wilson, J.E. Arch, Biochem. Biophys. 257, 1-12, 1987 A;Title: Rat brain hexokinase: amino acid sequence at A;Reference number: A39080; MUID:87324917 A;Accession: A32521 A;Molecule type: protein A;Residues: 1-21 <sch> C;Superfamily: human hexokinase I; hexokinase homology C;Superfamily: human hexokinase I; hexokinase homology C;Keywords: ATP; glycolysis; phosphotransferase Query Match Best Local Similarity 50.0%; Pred. No. 3.5e+02; Matches 5; Conservative 0; Mismatches 5; Oy 3 LOMDFGFPEH 12 I Db 3 LGFTFSFPXH 12</sch>	Ouery Match 25.2%; Score 28; DB 2; Best Local Similarity 71.4%; Pred. No. 2.2e+02; Matches 5; Conservative 1; Mismatches 1 Oy 3 LOMDFGF 9 : Db 11 LEMDVGF 17	human 1991 Ku-2,	30 21 18.9 14 2 PA0104 31 21 18.9 15 2 PH1788 32 21 18.9 15 2 S72432 33 21 18.9 17 2 A60743 34 21 18.9 18 2 149408 35 21 18.9 19 2 B60822 36 21 18.9 19 2 D32071 37 21 18.9 20 2 A60822 38 21 18.9 20 2 S07232 39 21 18.9 20 2 S07232 40 21 18.9 20 2 S35921 41 21 18.9 20 2 S35921 42 21 18.9 20 2 S35978 43 21 18.9 20 2 S35978 44 21 18.9 20 2 S35978 45 20 18.0 9 2 I46023 45 20 18.0 12 2 S56122 ALIGNMENTS
<pre>#text_change 12-Apr-1995 at the substrate hexose binding s1 ogy Length 21; ;; Indels 0; Gaps 0;</pre>	Length 19; 1; Indels 0; Gaps 0;	<pre>#text_change 30-Sep-1993 an octamer-binding protein relate</pre>	protein QF200070 - T cell receptor al epoxypropan isomer ornithine carbamoy cytochrome coxida cytochrome P450 UT T-cell receptor de cytochrome P450 PB ribulose-bisphosph nuclear antigen EB T-cell receptor ga cytochrome b558 - ubiquitin carrier collagen alpha 1(1 growth hormone rec type I DNA methylt

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calmodulin kinase 2 - fission yeast (Schizosaccharomyces pom
C;Species: Schizosaccharomyces pombe
C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_cha
C;Accession: T44936
R;Alemany, V; Aligue, R.
submitted to the EMBL Data Library, May 1996
A;Reference number: Z22873
A;Accession: T44936
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-16 <ALED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Conconi, M.; Szweda, L.I.; Levine, R.L.; Stadtman, E.R.; Friguet, B. Arch. Biochem. Biophys. 331, 232-240, 1996
A;Title: Age-related decline of rat liver multicatalytic proteinase activity and A;Reference number: S71306; MUID:96299287
A;Accession: S71306
A;Accession: S71306
A;Residues: 1-15 CCON>
A;Experimental source: liver
C;Keywords: heat shock; phosphoprotein; stress-induced protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             heat shock protein 90 - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 11-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 17-Apr-1998
C;Accession: S71306
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"-+ches 4; Conserv:
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                                                                                                                                                                   A; Cross-references:
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57.1%;
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Pred. No.
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Pred. No. 5.1e+02;
4; Mismatches 2
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5.5e+02;
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RESULT 7
$(3879)
$(3879)
$(5)phosphofructokinase (EC 2.7.1.11) B - rabbit (fragment)
$(6) phosphofructokinase (EC 2.7.1.11) B - rabbit (fragment)
$(7) Alternate names: phosphofructo-1-kinase B
$(7) Species: Oryctolagus cuniculus (domestic rabbit)
$(7) Cypate: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change 28-Apr-1993
$(7) Accession: $03879
$(7) Accession: $03879
$(8) A; Arta 995, 187-194, 1989
$(9) A; Arta 995, 187-194, 1989
$(9) A; Arta 995, 187-194, 1989
$(1) A; Accession: $03878; MUID:89194250
$(1) A; Accession: $03879
                                                                                                                                                                                                                  angiotensin precursor - horse (fragment)
C;Speciles: Equus caballus (domestic horse)
C;Date: 31-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 20-Mar-1998
C;Accession: A92775; A01250
R;Skeggs Jr., L.T.; Kahn, J.R.; Lentz, K.; Shumway, N.P.
J. Exp. Med. 106, 439-453, 1957
C;Superfamily: antithrombin III
C;Keywords: blood pressure control; hormone; vasoconstrictor
F;1-10/Product: angiotensin I #status experimental <AN1>
F;1-8/Product: angiotensin II #status experimental <AN2>
                                                                                                           A; Reference number: A92775
A; Accession: A92775
A; Molecule type: protein
A; Residues: 1-14 <SKE>
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A01250
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 06-Jan-1995
C;Accession: B61597
R;Shimeno, H.; Toda, A.; Ogata, S.; Nagamatsu, A.
Drug Metab. Dispos. 19, 291-297, 1991
A;Title: Purification and aminopyrine monooxygenase activity of liver micro: A;Reference number: A61597; MUID:91292910
A;Accession: B61597
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A;Molecule type: protein
A;Residues: 1-14 <SHI>
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Best Local Similarity 47.1%;
Matches 8; Conservative
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Pred. No.
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Pred. No. 5.7e+02;
1; Mismatches 3;
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5.3e+02;
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21.6%;

Score 24;

В

2

Length 14;

83.3%;

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glutathione transferase (EC 2.5.1.18) 1 - Arabidopsis thaliana (fragment) C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 22-Dec-1995 #sequence_revision 08-Feb-1996 #text_change 15-Jun-1996 C;Accession: PN0175 R:Tsugita, A.; Ramo, M.; Kawakami, M.; Ohki, Y. submitted to JIPID, December 1995 A;Description: Two dimensional electrophoresis of plant proceins and stand A;Reference number: PN0173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 10
B31769
B31769
T-cell receptor delta-2 chain J region - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 05-Nov-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Accession: B31769
R;Loh, E.Y.; Cwirla, S.; Serafini, A.T.; Phillips, J.H.; Lanier, L.L. Proc. Natl. Acad. Sci. U.S.A. 85, 9714-9718, 1988
A;Title: Human T-cell-receptor delta chain: genomic organization, div. A;Reference number: A94221; MUID:89071766
A;Accession: B31769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: protein
A; Residues: 1-15 <OLT>
C; Superfamily: antithrombin III
C; Keywords: 9lycoprotein; plasma
F;1-10/Product: angiotensin I #status
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A;Title: Purification and partial characterization A;Reference number: A60834; MUID:88113996
A;Accession: A60834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               angiotensin I precursor - dog (fragment N;Alternate names: angiotensinogen I N;Contains: angiotensin I C;Species: Canis lupus familiaris (dog) C;Date: 30-Sep-1993 #sequence_revision: C;Date: Jonate:                                                                                                                                                                                                                                                                                                                                                                                           В
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A; Residues: 1-17 <LOH>
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Best Local
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Pred. No. 8.6e
3; Mismatches
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0; Mismatches 1;
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8.6e+02;
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. 7.4e+02;
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                 RESULT
S36662
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C:Species: Candida parapsilosis
C:Date: 28-Jun-1991 #sequence_revision 28-Jun-1991 #text_change 07-Jun-1996
C:Accession: A37984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hypothetical protein PAB7382 - Pyrococcus abyssi (strain Orsay) C;Species: Pyrococcus abyssi C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change
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A;Molecule type: protein
A;Residues: 1-18 <TSU>
A;Experimental source: leaf
                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-20 <GUE>
                                                                                                                                                                                                                                                                               R;Guerin, B.; Bukusoglu, C.; Rakotomanana, F
J. Biol. Chem. 265, 19736-19741, 1990
A;Title: Mitochondrial phosphate transport.
A;Reference number: A37984; MUID:91060585
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A; Gene: PAB
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A;Residues: 1-18 <KAW>
A;Cross-references: GB:AJ248287; GB:AL096836; NID:g5458657; PIDN:CAB50405.1; PID:e151
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A;Accession: H75063
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submitted to the EMBL Data Library, July 1999
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dermorphin (Lys-7) [validated] - two-colored leaf frog
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Best Local Similarity
Matches 5; Conserv
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Pred. No. 9.2e
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C;Species: Phyllomedusa bicolor (two-colored leaf frog)
C;Date: 10-Dec-1993 #sequence_revision 13-Mar-1997 #text_change 31-Mar-2000
C;Accession: S36662
R;Mignogna, G.; Severini, C.; Simmaco, M.; Negri, L.; Falconieri Erspamer, G.; Kreil, G. FEBS Lett. 302, 151-154, 1992
A;Title: Identification and characterization of two dermorphins from skin extracts of the A;Reference number: S21152; MUID:92339502
A;Ression: S36662
A;Ression: S36662
A;Ression: S36662
A;Ressidues: 1-7 < MUID:92339502
                                                                                                                                                                                                                                                                                                                        A;Reference number: PA0001
A;Accession: PA0015
A;Molecule type: protein
A;Molecule type: protein
A;Residues: 1-14 <KRAM>
A;Experimental source: seed
C;Keywords: pyroglutamic acid; seed; storage protein
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seed storage protein 12s 2 - Arabidopsis thaliana (fragment)
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 30-Jun-1992 #sequence_revision 06-Jan-1995 #text_change 11-Jul-1997
C;Accession: PAO015
R;Kamo, M.; Kawakami, T.; Miyatake, N.; Tsugita, A.
submitted to JIPID, July 1994
A;Description: Separation and characterization of Arabidopsis proteins by two-dimensional
Search completed: December 21, 2000, 08:37:13 Job time: 317 sec
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re greater than or equal to the score of the result being
is derived by analysis of the total score distribution.
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UP25_UPEIN
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SUCB_CANFA
DCMS_PSECALVO
ALL5_CYDPO
ALL5_CYDPO
ALL5_CYDPO
GRAR_RANRU
ORCK_ORCLI
PSBP_UPSE
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ANGT HORSE STANDARD;
ID ANGT HORSE STANDARD;
AC P01016;
AC P01016;
AC P01016;
AC P01016;
AC R01.01, Created
DT 21-JUL-1986 (Rel. 01, Last se
DT 01-FEB-1996 (Rel. 33, Last an
DE ANGIOTENSINOGEN (FRAGMENT).
  RESULT
CAQS_RAT
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CAGS_RAT STANDARD: PRT; 20 AA.

P19633;
01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
CALSEQUESTRIN, SKELETAL MUSCLE ISOFORM (ASPARTACTIN)
PROTEIN) (FRAGMENT).
CASQ1.
Rattus norvegicus (Rat).
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NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Skeggs L.T. Jr., Kahn J.R., Lentz K., Shumway N.P.;
"The preparation, purification, and amino acid sequence of a
polypeptide renin substrate.";
J. Exp. Med. 106:439-453(1957).

-!- FUNCTION: IN RESPONSE TO LOWERED BLOOD PRESSURE, THE ENZYME REN
CLEAVES ANGIOTENSINI I, FROM ANGIOTENSINOGEN. ACE (ANGIOTENSIN
CONVERTING ENZYME) THEN REMOVES A DIPEPTIDE TO YIELD THE
PHYSIOLOGICALLY ACTIVE PEPTIDE ANGIOTENSIN II, THE MOST POTENT
PRESSOR SUBSTANCE KNOWN, WHICH HELPS REGULATE VOLUME AND MINERA
RAILANCE OF HONY FILIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INTERPRO; IPR0002:
PROSITE; PS00284;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
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TISSUE SPECIFICITY: MADE IN THE LIVER & SECRETED SIMILARITY: BELONGS TO THE SERPIN FAMILY.
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OPS__DHYPA
PHYPA
SODM_CANFA
HCYA_MEGCR
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GAST_MACMU
GRAST_MACMU
GRAST_MACMU
OPA7_PAPSP
LPP3_HUMAN
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Pred. No. 4.6e+02;
0; Mismatches 1
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ANGIOTENSIN
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P17645 drosophila
P80662 physcomitre
P54712 canis famil
Q10583 megathura c
P03057 escherichia
P20404 locusta mia
P33714 macaca mula
P12666 cavia porce
P82030 uperoleia i
P80055 papio sp. (
P56643 homo sapien
                                                                            (LAMININ-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IN THE PLASMA
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Matches 5
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and chick muscle.";
J. Cell Biol. 107:687-697(1988).
J. Cell Biol. 107:687-697(1988).
-i- FUNCTION: CALSEQUESTRIN IS A HIGH-CAPACITY, MODERATE AFFINITY,
-i- FUNCTION: CALSEQUESTRIN THROUGH STOR CALCIUM-BAUDING PROTEIN AND THUS ACTS AS AN INTERNAL CALCIUM STOR CALCIUM-BAUDING PROTEIN AUTOCIE CONTRACTION. BINDS 40
                                                                  NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                            01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
CYTOCHROME C OXIDASE POLYPEPTIDE VIIB-HEART (EC
                                                                                            Oxidoreductase; Mitochondrion.
                                                                                                                                                                                                                                                                                                    EUKARYOTA; Metazoa; Chordata; Craniata; Actinopterygii; Neopterygii; Teleostei; Acanthomorphia; Acanthopterygii; Percomoronomorphiaso: "Phoneumoronomorphiaso "Phoneumoronomorphiaso"
                                                                                                                                                                                                                                                                                                                                    Thunnus obesus (Bigeye tuna) Eukaryota; Metazoa; Chordata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00864; CALSEQUESTRIN_2; PAR PROSITE; PS00863; CALSEQUESTRIN_1; 1. Muscle; Glycoprotein; Calcium-binding. NON_TER 20 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SARCOPLASMIC RETICULUM'S TERMINAL CISTERNAE LUMINAL FAST SKELETAL MUSCLE CELLS. ASPARTACTIN IS FOUND IN LAMINA SURROUNDING INDIVIDUAL MUSCLE FIBERS.

1- TISSUE SPECIFICITY: SKELETAL AND HEART MUSCLE.

1- SIMILARITY: BELONGS TO THE CALSEQUESTRIN FAMILY.
                                                                                                                                                                                                               Arnold S., Lee I.,
Kadenbach B.;
                                                                                                                                                                                                                                                                                                                                                                                                                    P80980;
                                                                                                                                                                                                                                                                                                                                                                                                                                  COXN_THUOB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hall D.E., Frazer K.A., Hann B.("Isolation and characterization
                                                                                                                                                                                       Liver.
                                                                                                                                                                                                                                          MEDLINE; 97454291.
                                                                                                                                                                                                                                                          TISSUE-HEART;
                                                                                                                                                                                                                                                                                                Scombridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mammalia;
                                                                                                                                                                                                    The subunit structure of cytochrome-c oxidase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                         . J. Biochem. 248:99-103(1997).
FUNCTION: THIS PROTEIN IS ONE OF THE PACHETIC CATIONS OF CYTOCHROME C OXIDASE, THE THE MITOCHONDRIAL ELECTRON TRANSPORT.
CATALYTIC ACTIVITY: 4 FERROCYTOCHROME 4 FERRICYTOCHROME C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IN MUSCLE. THE RELEASE OF CALCIUM BOUND TO CALSEQUESTR. A CALCIUM RELEASE CHANNEL TRIGGERS MUSCLE CONTRACTION. TO 50 MOLES OF CALCIUM. ALSO BINDS LAMININ.
SUBCELLULAR LOCATION: THIS ISOFORM OF CALSEQUESTRIN OCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A31049; A31049.
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  4.
                Similarity
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                                                                                                                                                                                                                                                                                                Thunnus
    Conservative
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0 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                             Kim M.,
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2303
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Rodentia;
                19
57
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62
               7.1%;
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                                                                   MW.
                                                                                                                                                                                                                             Song E.,
 9: Score 22; DB
9: Pred. No. 1.4e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 22; DB
Pred. No. 1.4e
1; Mismatches
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ion of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                          Percomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PARTIAL.
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a laminin-
                                                                                                                                                                                                                             Linder D.,
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laminin-binding
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                                                                                                                                              TERMINAL OXIDASE
                                                                                                                                                                                                                                                                                                                                   Vertebrata; Euteleostomi;
                           DB 1;
                                                                                                                                                                                                                                                                                                                      Euteleostei;
                                                                                                                                                             NUCLEAR-CODED POLYPEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                 AA
                4e+03;
                                                                                                                    C + O(2) =
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                                                                  CRC64
                          Length 20;
                                                                                                                                                                                                  from tuna heart
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  Indels
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SAMP_MU
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Best Local
                                                                                                                                                                                                                                                                                                                                                    Eukaryota;
Pterygota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
01-JUN-1994 (Rel. 37, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
MITOCHONDRIAL MATRIX PROTEIN P1 (60 KDA CHAPERONIN) (HEAT SHOCK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1990
01-NOV-1990
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CH60_DROME
P35380;
      -!-
                                 "Identification of Drosophila wing imaginal dis dimensional gel analysis and microsequencing."; Exp. Cell Res. 206:220-226(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NON_TER
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Robey F.A., Tanaka T., Liu T.-Y.;
"Isolation and characterization of two major serum proteins"
"Isolation and characterization of two major serum proteins and amyloid P
                                                                                                                              Santaren J.F., van Garcia-Bellido A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DROME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mustelus canis (Smooth dogfish).
Eukaryota; Metazoa; Chordata; Craniata; V
Elasmobranchii; Galeomorphii; Galeoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SAMP_MUSCA
P19095;
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                                                                                                                                                                                                                        STRAIN-VALLECAS;
                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                  Ephydroidea;
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                       Drosophila melanogaster (Fruit fly)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               J. Biol.
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                                                                                                                                                                                              MEDLINE; 93272852
                                                                                                                                                                                                                                                                                                                                                                                                                                                        MMP-P1 OR HSP60.
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DISEASE: SAP IS A PRECURSOR OF AMYLOID COMPONENT P WHICH IS FOUND IN BASEMENT MEMBRANE AND ASSOCIATED WITH AMYLOID DEPOSITS.
   FUNCTION: IMPLICATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBUNIT: HOMOPENTAMER.
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RPRO; IPRO01759; -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chem.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PS00289; PENTAXIN;
                                                                                                                                                                                                                                                                                                                   Metazoa; Arthropoda; Tracheata; Hexapoda;
Neoptera; Endopterygota; Diptera; Brachyce
a; Drosophilidae; Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA;
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                                                                                                                                                                                                                            TISSUE-WING
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                                                                                                                                                            Damme
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50.0%;
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                                                                                                                                                         J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D05B5735B3386769 CRC64;
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ma; Pentaxin.
MITOCHONDRIAL PROTEIN IMPORT AND
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                                                                                                                                                            Puype M.,
                                                                                                                                                                                                                            IMAGINAL
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                                                                                                                                                         Vandekerckhove J.,
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DCMM_PSECF
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TEML_RA
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Best Local S
Matches 5
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Best Local S
Matches 2
             DCMM_PSECF STANDARD; PRT; 14 AA. P19914; 01-FEB-1991 (Rel. 17, Created) 01-FEB-1991 (Rel. 17, Last sequence update) 01-DEC-1992 (Rel. 24, Last annotation update) CARBON MONOXIDE DEHYDROGENASE MEDIUM CHAIN (EC
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NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                          Amphibian skin; Antibiotic; MOD_RES 11 11 11 sequence 11 AA; 1194 MW;
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Eukaryota; Metazoa; Chorda
Amphibia; Batrachia; Anura
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INTERPRO; IPR001844; -.
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30-MAY-2000 (Rel.
30-MAY-2000 (Rel.
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                                                                                                                                                                                                                                              Local Similarity
nes 5; Conser
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FUNCTION: HAS ANTIBACTERIAL ACTIVITY
GRAM-POSITIVE BACTERIA.
                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION:
SIMILARITY: BELONGS TO
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SUBCELLULAR LOCATION: MITOCHONDRIAL MATRIX (BY SIMILARITY: BELONGS TO THE CHAPERONIN (HSP60) F
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38°
38°
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Last annotation update)
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THE BREVININ/ESCULENTIN/GAEGURIN/RUGOSIN
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ata; Craniata; Vertebrata;
a; Neobatrachia; Ranoidea;
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Pred. No. 1.5e
6; Mismatches
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1E990549B3372724 CRC64;
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1.5e+03;
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                1.2.99.2)
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                  (FRAGMENT).
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Best Local S
Matches 4
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Oxidoreductase; Tricarboxylic aci.
NON_TER 16
SEQUENCE 16
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Best Local :
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                           ATPB_PHYPA STANDARD; PRT;
P80658;
01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence
01-NOV-1997 (Rel. 35, Last annotatio
ATP SYNTHASE BETA CHAIN (EC 3.6.1.34
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Submitted
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Kraut M.,
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                  ATPB.
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Physcomitrella
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nes 4; Conserv
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patens
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0; Score Pred.

Mismatches

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Length 16

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acid

cycle;

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P80460;
15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last seg
30-MAY-2000 (Rel. 39, Last ann
MALATE DEHYDROGENASE (EC 1.1.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Homology and usecure carboxydotrophic bacteria.";
Arch. Microbiol. 152:335-341(1989).
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'Homology and distribution
erstad K., Synstad B., Sirevag R.;
mitted (SEP-1996) to the SWISS-PROT data
CATALYTIC ACTIVITY: L-MALATE + NAD(+) =
SUBUNIT: HOMODIMER (BY SIMILARITY)
SIMILARITY: BELONGS TO THE LDH FAMILY. M
ERPRO; IPRO01252; -.
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ACCEPTOR:
COFACTOR: MOLYBDENUM.
SUBUNIT: CONSISTS OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                            14 AA; 1756 MW;
                                                                                                                                  (strain
                                                                                                                                                         Last sequence update)
Last annotation update)
(EC 1.1.1.37) (FRAGMENT)
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                                                                                                                  Chroococcales;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                  2e+03;
                                                                                                                 Synechocystis
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                                          OXALOACETATE +
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                SUBFAMILY
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; (
Mammalia; Eutheria; (
Bovidae; Bovinae; Bos [1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-DEC-1998
15-DEC-1998
15-JUL-1999
DIPEPTIDYL P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBUNIT:

-!- SUBUNIT: F-TYPE ATPASES HAVE 2 COMPONENTS, CF(1) - THE CATA-
CORE - AND CF(0) - THE MEMBRANE PROTON CHANNEL. CF(1) HAS F
SUBUNITS: ALPHA(3), BETA(3), GAMMA(1), DELTA(1), EPSILON(1)
HAS THREE MAIN SUBUNITS: A, B AND C.
-!- SUBCELLULAR LOCATION: CHLOROPLAST THYLAKOID MEMBRANE.
-!- SUMILARITY: BELONGS TO THE ATPASE ALPHA/BETA CHAINS FAMILY.
MENDEL; 13023; PHYPA; atpB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Cytokinin affects nuclear-
plastid enzymes.";
Planta 201:261-272(1997).
                                                                                                                                                                                     Comp. Biochem, Physiol. 1198:289-292(1998).

- PEUNCTION: REMOVES N-TERMINAL DIPERTIDES SEQUENTIALLY
- POLYPEPTIDES HAVING UNSUBSTITUTED N-TERMINI PROVIDED
PENULTIMATE RESIDUE IS PROLINE. BINDS AND REGULATES 1
                                                                                                                                                                                                                                                                            IV.";
                                                                                                                                                                                                                                                                                           Ben-Shooshan I., Parola A.H.;
"The CP-I subunit of adenosine deaminase
kidney is identical to human, mouse, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE: PS00152; ATPASE_ALPHA_BETA; I
ATP synthesis; Chloroplast; Thylakoid
Hydrolase; ATP-binding; Hydrogen ion 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPLEXING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BOVIN
                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 98293306.
                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DPP4_BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INTERPRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=PROTONEMA;
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                 SUBCELLULAR LOCATION: TYPE II MEMBRANE PROTEIN. A SOLUBLE FORM (BY SIMILARITY).

PTM: THE SOLUBLE FORM (SDPP) DERIVES FROM THE ME BY PROTEOLYTIC PROCESSING.
                                                                                                     POLYPEPTIDE.
SUBUNIT: HOMODIMER.
  BY PROTEOLY SIMILARITY:
                                                                                                                                                CATALYTIC ACTIVITY:
                                                                                                                                                                      POLYPEPTIDES HAVING PENULTIMATE RESIDUE OF ADA.
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3; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 (Rel. 37, Created)
8 (Rel. 37, Last sequence update)
9 (Rel. 38, Last annotation update)
PEPTIDASE IV (EC 3.4.14.5) (DPP IV)
PROTEIN) (ADCP-I) (FRAGMENTS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viridiplantae; Empryopuj --
Viridiplantae; Funariaceae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata; Craniata; Vertebrata; Euteleostomi; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
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                                                                                                                                              DIPEPTIDYL-POLYPEPTIDE
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id membrane;
n transport.
FAMILY
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                                                                                                                                            H(2)0
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ALSO KNOWN
                                         MEMBRANE FORM (MDPP)
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THE CATALYT
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Best L
                                          Matches
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Best Local :
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                                                                                                 Oxidoreductase; I CONFLICT 1 1 NON_TER 19 SEQUENCE 19 AA.
                                                                                                                                                                                                         "Characterization and cytotoxicity of L-amino acid ox venom of king cobra (Ophiophagus hannah).";
Int. J. Biochem. Cell Biol. 29:911-919(1997).
-i- FUNCTION: HAS CYTOTOXIC ACTIVITY (BY SIMILARITY).
-i- CATALYTIC ACTIVITY: A L-AMINO ACID + H(2)0 + O(2)
                                                                                                                                                                                                                                                                                                                                                                                                                    P81383;
15-DEC-1999 (Rel. 37, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
1-AMINO ACID OXIDASE (EC 1.4.3.2) (LAO) (LAO) (FRAG
Ophiophagus hannah (King cobra) (Naja hannah).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Lepidosauria; Squamata; Scleroglossa; Serpentes; Col
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NON_CONS
                                                                                                                                                                                                                                                                                                                                                                  TISSUE=VENOM;
MEDLINE; 94361525
                                                                                                                                                                                                                                                                                                  SEQUENCE OF 1-15.
                                                                                                                                                                                                                                                                                                                       Ponnudurai G., Chung M.C.M., Tan N.-H.;
"purification and properties of the L-amino
pit viper (Calloselasma rhodostoma) venome.";
Arch. Biochem. Biophys. 313:373-378(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hydrolase; Dip
Signal-anchor.
                                                                                                                                                                                                                                                                 Ahn M.Y., Lee B.M.,
                                                                                                                                                                                                                                                                            MEDLINE; 97449790
                                                                                                                                                                                                                                                                                        TISSUE-VENOM;
                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                              Elapidae;
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                                                                                                                                                                         COFACTOR: FAD.
SUBUNIT: HOMODIMER (PROBABLE).
                                                                                                                                                     SIMILARITY: BELONGS TO THE FLAVIN MONOAMINE OXIDASE FAMILY
                                                                                                                                                                                                 NH(3) + H(2)O(2).
                                                                                                                                            STRONG, TO MOUSE FIG-1
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                      LOMDFGFPEH
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LEESFQEPEY
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                                                     Similarity
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                                                                                                                                                                  GLYCOSYLATED
                                                                                                                                                                                                                                                                                                                                                                                                              Elapinae; Ophiophagus.
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2298
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                                                                                                  MW.
                                                                                                                                                                                                                                                                                                                       rhodostoma) venom.";
313:373-378(1994).
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                                         Score 19; DB
Pred. No. 3.9e
2; Mismatches
                                         2;
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Pred. No. 3.4e+03;
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S (IN REF. 2).
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30-MAY-2000
UPERIN 2.5.
                                                                                                                                                                                                                                                                                                                                                                                 Adams G.W., Severini C.;

"Novel uperin peptides from the dorsal glands of the australian floodplain toadlet Upercleia inundata.";

Aust. J. Chem. 49:475-484(1996).

-I- FUNCTION: SHOWS A MEDIUM ANTIBACTERIAL ACTIVITY AGAINST M. LUTEUS,

L. MESENTERIODES AND S. UBERIS.
-I- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
-I- MASS SPECTROMETRY: MW-1940; METHOD-FAB.

Amphibian skin; Antibiotic.

SEQUENCE 19 AA; 1941 MW; 5E94C6C757B463D9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UP21_UPEIN
P82027;
30-MAY-2000
30-MAY-2000
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Uperoleia inundata (Floodplain toadlet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Amphlbia; Batrachia; Anura; Neobatrachia; Bufonoidea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UP25_UPEIN P82031;
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Aust. J. Chem. 49:475-484(1996)
-I- FUNCTION: SHOWS A MEDIUM ANTIBACTERIAL ACTIVITY AGAINS:
L.MESENTERIODES, M.LUTEUS AND S.UBERIS.
-I- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
-I- MASS SPECTROMETRY: MW-1926; METHOD-FAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Uperoleia inundata (Floodplain toadlet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-SKIN SECRETION;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE, AND MASS SPECTROMETRY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bradford A.M., Raftery M.J., Bowie Adams G.W., Severini C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amphibian skin; Antibiotic
SEQUENCE 19 AA; 1927 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-SKIN SECRETION;
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3; Conserv
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3; Conserv
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(Rel.)
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(Rel. 39, Last sequence (Rel. 39, Last annotation)
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37.58;
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annotation
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Pred. No. 3.9e
3; Mismatches
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Pred. No.
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3.9e+03;
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MEDLINE, 90055678.

Kraut M., Hugendieck I., Herwig S., M.
"Homology and distribution of CO dehy.
carboxydotrophic bacteria.";
Arch. Microbiol. 152:335-341(1989).
-1- CATALYTIC ACTIVITY: CO + H(2)O +
2 H(+) + FERRICYTOCHROME B-561.
                                                                                                                                                                                                                                                                                                                                                                              IS_PSECA STANDARD; PR
DCMS_PSECA STANDARD; PR
p19921;
01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last seque
01-JUN-1994 (Rel. 29, Last annot
CARBON MONOXIDE OXYGENASE (CYTOC
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15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
15-JUL-1999 (Rel. 38, Last annotation update)
PUTATIVE SUCCINYL-COA LIGASE [GDP-FORMING] BETA-CHAIN (EC SUCCINYL-COA SYNTHETASE, BETA CHAIN) (SCS-BETA) (FRAGMENT
                                                                                                                                                                                                                                                                                                     Pseudomonas carboxydovorans.
Bacteria; Proteobacteria; alpha subdivision;
Bradyrhizobium group; Oligotropha.
                                  PIR; PL0144; PL0144.
Oxidoreductase; Molybdenum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- SIMILARITY: TO OTHER BETA SUBUNITS OF SUCCINYL-
OF MALATE--COA LIGASE AND TO ATP CITRATE-LYASE.
HSC-2DPAGE; P99507; DOG.
INTERPRO; IPR000303; -.
PROSITE; PS01217; SUCCINYL_COA_LIG_3; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           dog heart proteins.";
Electrophoresis 18:2795-2802(1997).
-!- CATALYTIC ACTIVITY: SUCCINATE + COA +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dunn M.J., Corbett J.M., Wheeler C.I "HSC-2DPAGE and the two-dimensional
                                                                                        -!- COFACTOR: MOLYBDENUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBUNIT: HETERODIMER OF AN ALPHA AND A BETA CHAIN (BY SIMILARITY).
SUBCELLULAR LOCATION: MITOCHONDRIAL (BY SIMILARITY).
SIMILARITY: TO OTHER BETA SUBUNITS OF SUCCINYL-COA SYNTHETASE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PATHWAY: SUBSTRATE LEVEL PHOSPHORYLATION
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3; Conserv
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 21 AA;
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2270 MW;
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33.3%;
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Last annotation updat
NASE [CYTOCHROME B-561
                                                                                          THREE
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Pred. No. 4.1e
4; Mismatches
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68D4380629401B9C CRC64;
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B-561]
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Ouery Match 17.1%: Score 19: DB 1; Length 21; BBST Local Similarity 44.4% Pred: Mp. 43.2403; My. 32403; My. 32
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Minimum
Maximum
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No.
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09TRR6; PRELIMINARY: PRT; 19 AA.
09TRR6 01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
C1-CALCYCLIN-ASSOCIATED PROTEIN, CAP50-CA2+/PHOSPHOLIPID-BINDING PROTEIN
L-14 FRAGMENT.
                                                                                                                                                                                                                                Tokumitsu H., Mizutani A., Minami H., Kobayashi R., Hidaka H.; "A calcyclin-associated protein is a newly identified member of the Ca2+/phospholipid-binding proteins, annexin family."; J. Biol. Chem. 267:8919-8924(1992).

SEQUENCE 19 AA; 2018 MW; 9A54062504B8322E CRC64;
                                                                                                                                                                                                                                                                                                                 Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                    P70861
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Q9prm4 gallus gall	Q9tral bos taurus	Q9twi4 ceratitis c	Q38371 bacteriopha	Q9quj4 mus sp. mep	Q9t2s2 solanum tub	Q41526 triticum ae			Q9trll bos taurus		Q80817 human t-cel	Q41496 solanum tub	09zyb7 spinaria sp		Q9prn5 oncorhynchu	Q9qve3 rattus sp.		Q9x3i3 prochloroco	035758 rattus norv	034770 borrelia af	O31296 borrelia af	Q9x533 escherichia	Q9x534 leclercia a	096417 drosophila	085406 coxiella bu

ALIGNMENTS

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RESULT P70861 P70861 P7 AC P7 OI DT OI DT OI DE TE OS BC OC BC RN [1]
P70861;
01-FEB-1997 (TrEMBLrel. 02, Created)
01-FEB-1997 (TrEMBLrel. 02, Last sequence updated)
01-NOV-1998 (TrEMBLrel. 08, Last annotation upported (FRACMENT).
Borrelia burgdorferi (Lyme disease spirochaete)
Bacteria; Spirochaetales; Spirochaetaceae; Borrelia
                                                                                                                                                                                                              7 FGFPEHLLVDFLQSLS 22
                                                                                                                                                                                     FGTDEQAIIDXLGSRS 17
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                                                                                                               PRELIMINARY;
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                                                      Created)
Last sequence update)
Last annotation update)
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Pred. No. 1.6e+02;
Pred. matches 7; Indels
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O9TWH5;
O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
O1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
40 KDA GAP JUNCTION PROTEIN (FRAGMENT).
Heliothis virescens (Noctuid moth) (Owlet moth).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Di
Noctuoidea; Noctuidae; Heliothinae; Heliothis.
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Ge Y , Old I.G., Girons I.S., Charc Ge Y , Old I.G., Girons I.S., Charc The flgk motility operon of Borrel signa 70-like promoter.;
Microbiology 143:1681-1690(1997).

EMBL; UG2901; AABG2742.1; -.

NON TER 21 21

SEQUENCE 21 AA; 2432 MW; F33E1E
                                                                                                                                                                                                                                                                                                               Q9UGS1;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-MAY-2001 (NOVEL PROTEIN SIMILAR TO GS2) (FRAGMENT).
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Ryerse J.S.;

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Rectary Junctions isolated in in in the process of                                    Submitted
EMBL; AL03
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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HOShino T., Mizutani P
"Plant annexin form hore aggregation.";

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STONIENCE 22 AA; 2/
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09TRQ7;
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01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Magnoliophyta; eudicotyledons; Asteridae; euasterids Solanaceae; Capsicum.
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Eukaryota; Viridiplantae; Emb
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Mizutani A., Usuda N.,
Kobayashi R., Hidaka H
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE.
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Eukaryota; Metazoa;
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Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
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AA; 2465 MW;
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AA; 1446 MW; C8322EB96DD9C6C6
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WW; A36D11A1FE311F0F_CRC64;
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ng Ca(2+)-dependent
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4.9e+02;
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01-MAY-1999
01-MAY-1999
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Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Eukaryota; Metazoa; Chaqomorpha; Leporidae; Oryctolag
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Q9ZG55;
                                                                                                                                                                                                                                                                                                                                                   "Evidence for insufficient chondrocytic different of full-thickness defects of articular cartilage. Matrix Biol. 15:39-47(1996).
EMBL; S83370; AAB50773.1;
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01-JUL-1997 (TrEMBLrel. 04, Last sequenc
01-MAY-2000 (TrEMBLrel. 13, Last annotat
PRO ALPHA1 TYPE II COLLAGEN (FRAGMENT).
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Bacteria; Chlamydiales;
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Chlamydia
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Pred. No. 1.2e+03;
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Pred. No. 9.2e+02;
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Q9PS70;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
11.0W DENSITY LIPOPROTEIN RECEPTOR-RELATED PROTEIN.
                                                                                                                                                                                                                                                                                             Stifani S., Barber D.L., Aebersold R
Schneider W.J.;
"The laying hen expresses two differ
receptor-related proteins.";
J. Biol. Chem. 266:19079-19087(1991)
SEQUENCE 19 AA; 1861 MW; 4EEC931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
CALMODULIN KINASE 2 (FRAGMENT).
Schizosaccharomyces pombe (Fission yeast).
Eukaryota; Fungi; Ascomycota; Schizosaccharomycetales;
Schizosaccharomycetaceae; Schizosaccharomyces.
                                        Petunia hybrida (Petunia).
Eukaryota; Viridiplantae; Embryophyta;
Magnoliophyta; eudicotyledons; Asterid
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Eukaryota; Metazoa; Choi
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Submitted (MAY-1996) to t
EMBL; U57982; AAD09466.1;
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MEDLINE;
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                                Solanaceae;
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                                 Petunia.
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Neognathae; Galliformes; Phasianidae; Phasiani
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Pred. No.
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                                           Asteridae;
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1.2e+03;
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Q9542;
Q9542;
Q9F842;
O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
PHENOBARBITAL.THOUCED 48 KDA CYTOCHROME P-450 (FRAGMENT).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutel
**~~hosauria; Aves; Neognathae; Galliformes; Phasianidae;
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01-JAN-1998
01-JAN-1998
01-NOV-1998
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MEDLINE: 92406903.

Nakai K., Ward A.M., Gannon M., Rifkind A.B.;

Nakai K., ward A.M., Gannon M., Rifkind A.B.;

"Beta-naphthoflavone induction of a cytochrome P-450 arachidonic acid epoxygenase in chick embryo liver distinct from the aryl hydrocarbon hydroxylase and from phenobarbital-induced arachidonate epoxygenase.'

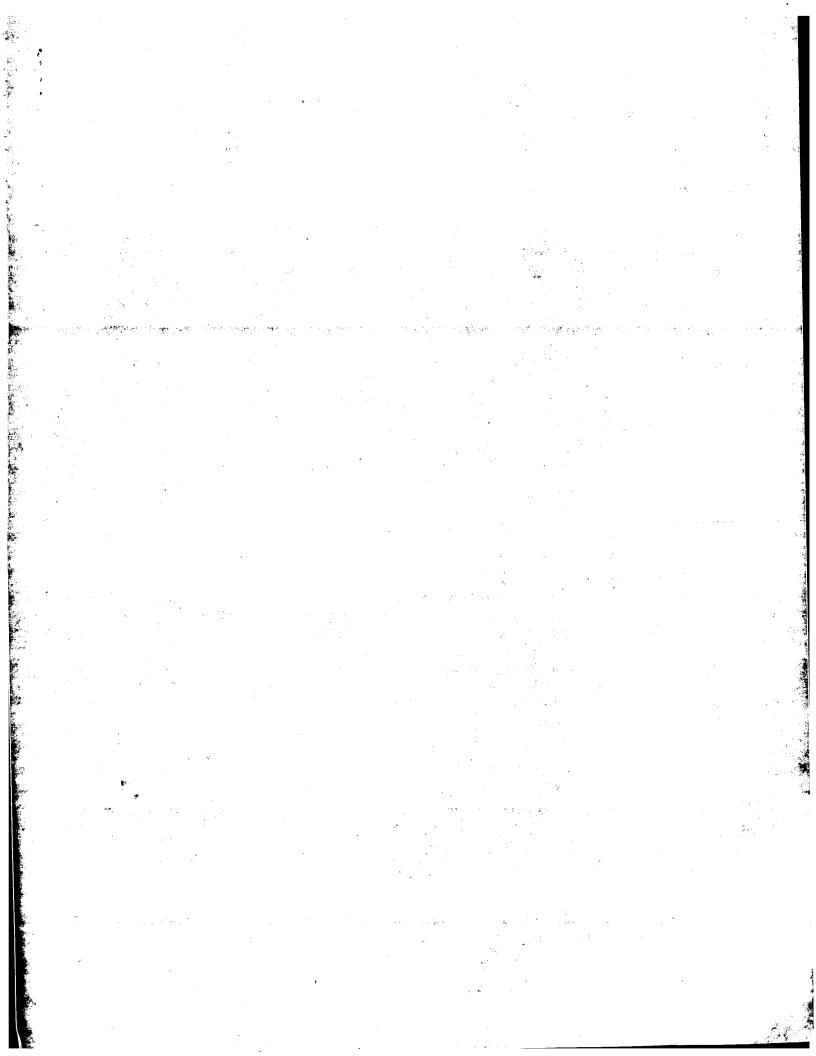
J. Biol. Chem. 267:19503-19512(1992).

J. Biol. Chem. 267:19503-19512(1992).
                     EMBL; UY
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"Purification and partial characterization of NADPH-cytochrome reductase from Petunia hybrida flowers.";
Plant Physiol. 106:643-650(1994).
SEQUENCE 20 AA; 2390 MW; 8BCDA6F8CF7EEDEE CRC64;
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Bacteria; Spirochaetales;
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      SEQUENCE
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EMBL; v.
                                                                                           STRAIN=DN127CL9-2, AND MEDLINE; 95154673.
"Expression and sequence of outer surface American isolates of Borrelia burgdorferi. FEMS Microbiol. Lett. 124:367-372(1994). EMBL; U93694; AAC45522.1; -. EMBL; U04280; AAC45543.1; -.
                                                                                                                                                                     "The Borrelia burgdorferi circular plasmid cp26: coplasmid structure and targeted inactivation of the Mol. Microbiol. 25:361-374(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "The Borrelia burgdorferi circular plasmid cp26: plasmid structure and targeted inactivation of the Mol. Microbiol. 25:361-374(1997).
EMBL; U93701; AAC45536.1; -.
NON_TER 13
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b time	Ouery Match 21.6%; Score 24; DB 2; Length 13; Best Local Similarity 57.1%; Pred. No. 1.4e+03; Matches 4; Conservative 2; Mismatches 1; Indels 0; Gaps 0; Oy 2 LLQMDFG 8	DR EMBL; U04282; AAC45541.1; FT NON_TER 13 13 SQ SEQUENCE 13 AA; 1407 MW; 08FAB3930E0BC720 CRC64;



Run 8

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2. Appli 42. Appli 77. Appli 117. Appli 117. Appli 117. Appli 47. Appli 4. Appli 4. Appli 4. Appli 4. Appli 4. Appli 4. Appli 5. Appli 25. Appli 26. Appli 27. Appli 28. Appli 29. Appli

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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and is derived by analysis of the total score distribution.
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/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/6CTUS_COMB.pep:*
/cgn2_6/ptodata/2/iaa/backfiles1.pep:*
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US-08-454-207A-45
US-08-454-207A-41
PCT-US95-06077-5
US-08-481-985B-26
PCT-US95-01671-9
US-08-481-985B-26
PCT-US95-01671-9
US-08-484-207A-31
US-08-454-207A-33
US-08-454-207A-33
US-08-454-207A-33
US-08-454-207A-38
US-08-454-207A-38
US-08-454-207A-38
US-08-454-207A-38
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US-08-454-207A-39
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Compugen Ltd
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Patent No. 5266328
Sequence 26, Appl
Sequence 30, Appl
Sequence 41, Appl
Sequence 44, Appl
Sequence 44, Appl
Sequence 5, Appli
Sequence 6, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 31, Appl
Sequence 31, Appl
Sequence 33, Appl
Sequence 33, Appl
Sequence 34, Appl
Sequence 35, Appl
Sequence 36, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 38, Appl
Sequence 39, Appl
                                                                                                                                                                                                                                                                                                                              Description
                                                                                                                                                                                                                                                                                                        Sequence 43,
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eing printed,
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5266328
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                                                                               US-08-454-207A-43
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                         Matches
                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No. 5710123
GENERAL INFORMATION:
                                                                                                                                                                            APPLICATION NUMBER: US/08/454,207A
FILING DATE: 09-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/12110
FILING DATE: 13-DEC-1993
PRIOR APPLICATION NUMBER: 07/997,771
APPLICATION NUMBER: 07/997,771
APPLICATION NUMBER: 07/997,771
FILING DATE: 18-DEC-1992
ATTORNEY/AGENT INFORMATION:
NAME: Dianne B. Elderkin
REGISTRATION NUMBER: 28.598
REFERENCE/DOCKET NUMBER: CCOR-0183
                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
TELEPAX: 215-568-3439
INFORMATION FOR SEQ ID NO: 43:
                                                                                                                                                                                                                                                                                                                                       ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 1.44
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Heavner, George A.
APPLICANT: Kruszynski, Marian
TITLE OF INVENTION: PEPTIDE IN
NUMBER OF SEQUENCES: 70
                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                          SOFTWARE: WordPerfect 6.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                         LENGTH: 9
TYPE: ami
TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Woodcock Washbu
STREET: One Liberty Place
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: U
ZIP: 19103
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   8 SKKKLFL 14
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5. 5710123
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100.0%; Pr
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Place - 46th Floor
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US-08-456-1128-42
US-08-456-1128-42
US-08-159-339A-77
US-08-310-912A-117
PCT-US94-01234-47
PCT-US94-01234-47
US-09-313-9164-4
US-07-989-764-4
US-08-233-203-10
US-08-2133-233-20
US-08-243-879A-24
US-08-243-879A-24
US-08-243-879A-24
US-08-123-435
US-08-100-4148-32-420
US-08-100-4148-32-420
                                 Score 33;
Pred. No.
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                        Mismatches
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APPLICANT: SKUBITZ, AMY P.N.; FURCHT, LEO T.

TITLE OF INVENTION: LAMININ CHAIN POLYPEPTIDES FROM
THE CARBOXY TERMINAL GLOBULAR DOMAIN
NUMBER OF SEQUENCES: 14
CURRENT APPLICATION DATA:
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                             Matches
                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Wang, Chang Yi
TITLE OF INVENTION: NOVEL LHRH PEPTIDE
TITLE OF INVENTION: IMMUNOGENS
NUMBER OF SEQUENCES: 106
CORRESPONDENCE ADDRESS:
ADDRESSE: Morgan & Finnegan, L.L.P.
                                                                                                                                                                                                                                  TELEFAX: 212-751-6849 INFORMATION FOR SEQ ID NO:
                                                                                                                                     TOPOLOGY: 11 MOLECULE TYPE:
                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-758-4800
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/09/100,414B
FILING DATE: 20-JUNE-1998
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Maria H. Lin
REGISTRATION NUMBER: 29,323
REGISTRATION NUMBER: 29,323
                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC Windows
SOFTWARE: Word 97
                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                TELEPHONE: 212-751-6849
                                                                                                                                                                              TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: New York
STATE: NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/07/573,672 FILING DATE: 27-AUG-1990
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                                                                                                                                                                                           LENGTH:
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                                        30.2%; Score 29; 100.0%; Pred. No.
                         0;
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Pred. No. 25;
                           Mismatches
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; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-100-414B-30
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Sequence 30, Application US/09100414B
Patent NO. 6025468
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                      RESULT 5
US-07-654-839-5
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                                                                                                                                                                                                                                                                 Sequence 5, Application US/07654839 Patent No. 5372933
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 30.2%; Score 29; DB 3; Best Local Similarity 100.0%; Pred. No. 83; Matches 6; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 10154-0054
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: IBM PC compatible
COMPUTER: IBM PC compatible
OMPUTER: VSTEM: PC Windows
                                                                                                                                                                                    GENERAL INFORMATION:
GENERAL INFORMATION, CONCEPC
APPLICANT: Plow, Edward F
APPLICANT: Ginsberg, Mark H
APPLICANT: Ginsberg, Mark H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 212-758-48
TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: MARIA H. LIA
REGISTRATION NUMBER: 29,323
REFERENCE/DOCKET NUMBER: 11:
                                                                                                          NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 212-758-4800
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CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Wang, Chang Yi
TITLE OF INVENTION: NOVEL LHRH
TITLE OF INVENTION: IMMUNOGENS
                                                                                                                                                   TITLE OF INVENTION: MONOCLONAL ANTIBODIES AGAINST TITLE OF INVENTION: RECEPTOR-INDUCED BINDING SITES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
ADDRESSEE: The Scripps Research Institute, Office of ADDRESSEE: Patent Counsel STREET: 10666 No. 5372933th Torrey Pines Road., Suite 220, STREET: Mail Drop TPC8 CITY: La Jolla STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/100,414B FILING DATE: 20-JUNE-1998 CLASSIFICATION: 424
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CITY: New York
STATE: NY
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                                                                                                                                                                                                                                                                                                                                                                                1 KKKLFL 6
                                                                                                                                                                                                                                                                                                                                                                                                                   9 KKKLFL 14
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Query Match
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; HYPOTHETICAL:
US-07-654-839-5
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INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 45, Application US/08454207A Patent No. 5710123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 29-SEP-1989
ATTORNEY/AGENT INFORMATION:
NAME: Bingham, Douglas A
REGISTRATION NUMBER: 32,457
REFERENCE/DOCKET NUMBER: SCR0367P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-554-2937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                          ZIF: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 1.44 Mb
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Wordberfect 6.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/12110
FILING DATE: 13-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/997,771
                                                                       CLASSIFICATION: 514
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: PEPTIDE INHIBITORS OF SELECTIN BINDING NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz 6 No. 5710123ris LLP STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/252,753 FILING DATE: 03-OCT-1988 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Heavner, George A. APPLICANT: Kruszynski, Marian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
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ZIP: 19103
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COPTUANDO.
                                                                                                             APPLICATION NUMBER: US/0 FILING DATE: 09-JUN-1995
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ilarity 38.5%;
Conservative
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US-08-454-207A-30
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 85. Matches 6; Conservative
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                                                                                                                                                                                   APPLICATION NUMBER: PCT/US93/
ETILING DATE: 13-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/997,77
ETILING DATE: 18-DEC-1992
ATTORNEY/AGENT INFORMATION:
NAME: Dianne B. Elderkin
REGISTRATION NUMBER: 28,598
REFERENCE/DOCKET NUMBER: CCOF
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1000-3100
TELETAN: 215-568-3100
                                                                                                                               TELEFAX: 215-568-3439
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 1910
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch disk, 1.44 Mb
COMPUTER: IBM PC compatible
COMPUTER: FC-DOS/MS-DOS
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-568-3100
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: WordPerfect 6.1 CURRENT APPLICATION DATA:
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ATTORNEY/AGENT INFORMATION:
NAME: Dianne B. Elderkin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: F
                                                                                                                    LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 09-JUL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5710123ris LLP STREET: One Liberty Place - 46th Floor
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                                                                                                   amino acids
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85.7%;
27.18;
66.78;
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Pred. No. 1.2e+05
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Score 26; DB 1; Pred. No. 1.2e+05;

Length 9;

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Best Local Similarity
%** 6; Conserve
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                                                                                                Sequence 44, Application US/08454207A Patent No. 5710123 GENERAL INFORMATION:
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        APPLICANT: Heavner, George A.
APPLICANT: Kruszynski, Marian
TITLE OF INVENTION: PEPTIDE INHIBITORS OF SELECTIN BINDING
NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 07/997,771
FILING DATE: 18-DEC-1992
ATTORNEY/AGENT INFORMATION:
NAME: Dianne B Elderkin
REGISTRATION NUMBER: 28,598
REFERENCE/DOCKET NUMBER: CCOR-(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: PEPTIDE INHIBITORS OF SELECTIN BINDING NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5710123ris LLP STREET: One Liberty Place - 46th Floor
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 6 7
                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 9 amino acids
TYPE: amino acid
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   ADDRESSEE:
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TELEFAX: 215-568-3439
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
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Woodcock Washburn Kurtz Mackiewicz & No. 5710123ris LLP
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75.0%;
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Pred. No. 1.2e+05;
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                                                                                                                                                                                                                                CITY:
STATE:
                                                                                                                                                                                                               COUNTRY:
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Query Match
Best Local Similarity
"-+-hes 6; Conserv?
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FILING LALL.
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/247,991
APPLICATION NUMBER: 23-MAY-1994
                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/06077
                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Immunobiology Research, Institute Inc.
TITLE OF INVENTION: Vaccine Interdiction of Extracellular
TITLE OF INVENTION: Transactivating Proteins of Human Immunodeficiency Virus
TITLE OF INVENTION: and Other Chronically Infecting Viruses Employing Similar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 18-DEC-1992
ATTORNEY/AGENT INFORMATION:
NAME: Dianne B. Elderkin
REGISTRATION NUMBER: 28,
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/99
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MEDIUM TYPE: 3.5 inc
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: WordPerfect
CURRENT APPLICATION DATA:
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TELEPHONE: 215-568-3100
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85.7%;
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Pred. No. 1.2e+05;
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Query Match
Best Local Similarity
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Best Local Similarity
Thes 5; Conserve
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TOPOLOGY: unknown
MOLECULE TYPE: peptide
PCT-US95-06077-5
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                                                                                                                                    TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
STRANDEDMESS: unknown
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2, Applic
Patent No. 5817308
                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/195,874
ETIJING DATE: 02-FEB-1994
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: MUCLING, Ann M.
REGISTRATION UNMBER: 33,977
REFERENCE/DOCKET NUMBER: 850.14-US-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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TELEFAX: 215-540-5818
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                   TELEPHONE: 612-339-0331
                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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TITLE OF INVENTION:
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Minneapolis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/08195874
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                       Conservative
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                                       27.1%;
55.6%;
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83.3%;
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                    Score 26; DB 2; L
Pred. No. 2.2e+02;
2; Mismatches 2;
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Pred. No.
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                                  Sequence 26, Application US/08481985B Patent No. 6011146 GENERAL INFORMATION:
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Best Local Similarity
Matches 5; Conserv
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MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS-/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 530
PRIOR APPLICATION UNBER: US 07/801,818
FILING DATE: 05-DEC-1991
CLASSIFICATION: 530
PRIOR APPLICATION DATA: 07/20/472
   APPLICANT:
APPLICANT:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
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FILING DATE: 15-NOV-1991
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
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APPLICANT: Kourilsky, Philippe
TITLE OF INVENTION: Complex(MHC) Determinant and Methods for Using the
TITLE OF INVENTION: Determinant
TITLE OF INVENTION: Determinant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
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ADDRESSEE: Dunner
CORRET: 1300 I Street, N.W., Suite 700
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                                                                                                                                              7 LKAIYEKKK 15
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GY: linear
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Mottez, Estelle
Abastado, Jean-J
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55.6%;
   Jean-Pierre
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Pred. No. 2.2e+02;
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Length 15;

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PCT-US95-01671-2
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Best Local S
Matches 5
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GENERAL INFORMATION:
APPLICANT: University of Rochester
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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APPLICATION NUMBER: US 07/
FILING DATE: 15-NOV-1991
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Meyers, Kenneth J.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DDS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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TITLE OF INVENTION: Altered Major Histocompatibility Complex
TITLE OF INVENTION:
                                                                                                                                                                                                               NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                      TITLE OF INVENTION: Inducing Tolerance With Tolerogenic TITLE OF INVENTION: Fusion Proteins
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APPLICATION NUMBER: US 0
FILING DATE: 05-DEC-1991
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
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CITY: Washington
                                                                                                                                      STATE: Minnesota
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nes 5; Conserv
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REGISTRATION NUMBER: 25,146
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                                                                                                     COUNTRY: U
ZIP: 55402
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3500 IDS Center
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                                                                                                                     United States of America
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Pred. No. 2.2e+02;
Pred. No. 2.2e+02;
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US-08-305-871A-9
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Best Local Similarity
Weatches 5; Conserv:
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                                  TELEFAX: (415) 576-0300 INFORMATION FOR SEQ ID NO: (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 612-339-0331
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NAME: Kevin W. Raasch
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APPLICATION NUMBER: PC'
               SEQUENCE CHARACTERISTICS:
                                                                                     REFERENCE/DOCKET NUMBER: 14 TELECOMMUNICATION INFORMATION:
                                                                                                                                                         FILING DATE: 14-SEP-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                  CLASSIFICATION: 424
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Sidney, John
APPLICANT: Alexander, Jeffrey L.
TITLE OF INVENTION: Alteration of Immune Response Using Pan
TITLE OF INVENTION: DR-Binding Peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: APPLICANT:
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CITY: San Francisco
                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/305,871A FILING DATE: 14-SEP-1994
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REGISTRATION NUMBER: 35,651
REFERENCE/DOCKET NUMBER: 85
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                                                                    TELEPHONE:
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ENGTH:
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16 amino acids
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Grey, Howard M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sette, Alessandro
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                                                                        (415) 576-0200
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                                                                                                                                          Kevin
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Pred. No. 2.2e+02;
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Search completed: December 21, 2000, 08:31:50 Job time: 373 sec	: STRANDEDNESS: ; TOPOLOGY: linear ; MOLECULE TYPE: peptide US-08-305-871A-9 Query Match Best Local Similarity 55.6%; Pred. No. 2.3e+02; Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0; Qy 3 VQASYSKKK 11 :: Db 8 LKAIYEKKK 16
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	GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.	
OM protein - pro	OM protein - protein search, using sw model	-
Run on:	December 21, 2000, 08:30:08; Search time 112.59 Seconds (without allgaments) 11.273 Million cell updates/sec	Seconds updates/sec
Title: Perfect score: Sequence:	US-08-934-367-35 96 1 TTYQASYSKKKLFLSLLDFQ 20	
Scoring table:	BLOSUM62 Gapop 10.0 , Gapext 0.5	
Searched:	182106 seqs, 63460219 residues	
Total number of	Total number of hits satisfying chosen parameters: 3930	
Minimum DB seq length: 0 Maximum DB seq length: 20	ength: 0	
Post-processing:	Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	
Database :	PIR_65:* 1: pir1:* 2: pir2:* 3: pir3:* 4: pir4:*	
Pred. No.	Pred. No. is the number of results predicted by chance to have a	ע

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	₽B	ID	Description
L .	30	-:	18	2	145	probable heme-bind
2	28	29.2	14	Ν	S13864	enzyn
w	26	7.	14	4	526	obin beta
4	25	6.	6	N	61	rat
Ų	24	5	17	2	I49593	ibr
6	24		17	ν	8473	TR protein
7	23		19	2	9	transthyretin - bu
в	23		20	N	S39049	cytotoxin-binding
9	22	2	13	N	PH0786	T-cell receptor al
10	22	.2	15	N	S65717	prostaglandin D-sy
: =	22		15	2	PA0046	44
1.2	22	۸,	16	N	S3444	z protein - St
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16	21		14	2	A44920	enzoate 1
17	21	1	15	N	PN0662	oci.
. 18	21	۲.	16	N	B45895	'r-cell surface gly
19	21		17	N	S32587	bate pe
20	21	۲.	17	2	A35550	
21	21	21.9	19	2	S59717	al pı
22	21	۲.	20	N	H49034	'n
23	20	0	15	N	S03955	acidic fibroblast
24	20	0	16	ν	S01669	rRNA N-glycosidase
25	20	0.	16	N	S02473	coat protein VP1 -
26	20		16	2	S70331	'n.
27	20	0	18	N	S45373 .	translation elonga
28	20	0	20	N	S29108	
29	20	0	20	N	S63602	glutathione S-tran

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
19	19	19	19	19	19	19	19	19	19	19	19	19	20	20	20
19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	20.8	20.8	20.8
19	19	1.8	18	17	17	15	14	14	13	12	10	9	20	20	20
N	N	N	N	N	N	N	2	ຸ	Ŋ	N	2	w	Ŋ	Ŋ	N
A47689	S43652	S48863	в35910	PH1331	S61451	S36890	A47421	S14336	S47365	S26556	A13687	PC7076	S46479	A44921	PL0192
flagellar sheath p	serpin WS2CI - whe	cyclin C - mouse (neurofibromatosis-	Ig heavy chain DJ	hypothetical prote	ribosomal protein	leukotriene B-4 12	mastoparan B - hor	T-cell antigen rec	T-cell receptor be	caerulein-like pep	spectrin alpha cha	retinoid-X-recepto	hydroxypyruvate re	Ig lambda 2 chain

ALIGNMENTS

Qy 9 KKKLFLSLL 17	Query Match 29.2%; Score 28; DB 2; Length 14; Best Local Similarity 66.7%; Pred. No. 2.1e+02; Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;	C;Accession: S13864 R;Rospert, S.; Linder, D.; Ellermann, J.; Thauer, R.K. Eur. J. Biochem. 194, 871-877, 1990 A;Title: Two genetically distinct methyl-coenzyme M reductases in Methanobacterium A;Reference number: S13864; MUID:91099370 A;Accession: S13864 A;Molecule type: protein A;Residues: 1-14 <ross a;experimental="" c;keywords:="" marburg="" methanogenesis;="" oxidoreductase<="" source:="" strain="" th=""><th>chain - Methar</th><th>Qy 8 SKKKLFLSLL 17 : : Db 2 AKKKAFIPLL 11</th><th>Query Match 31.2%; Score 30; DB 2; Length 18; Best Local Similarity 60.0%; Pred. No. 1.2e+02; Matches 6; Conservative 2; Mismatches 2; Indels 0; Gaps 0;</th><th>A;Genome: chloroplast A;Genome: chloroplast protein cemA C;Superfamily: maize chloroplast protein cemA C;Keywords: chloroplast; heme; transmembrane protein</th><th>A;Status: preliminary A;Molecule type: DNA A;Molecule type: DNA A;Residues: 1-18 <smi> A;Cross-references: EMBL:X54750; NID:g12194; PID:g12198 C:Ganatics</smi></th><th>R;Smith, A.G.; Wilson, R.J.; Kaethner, T.M.; Willey, D.L.; Gray, J.C. submitted to the EMBL Data Library, October 1990 A; Reference number: S14557 A; Accession: S14560</th><th>RESULT 1 \$14560 S14560 probable heme-binding protein - garden pea chloroplast (fragment) C;Species: chloroplast Pisum sativum (garden pea) C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 11-Jan-2000 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 11-Jan-2000</th></ross>	chain - Methar	Qy 8 SKKKLFLSLL 17 : : Db 2 AKKKAFIPLL 11	Query Match 31.2%; Score 30; DB 2; Length 18; Best Local Similarity 60.0%; Pred. No. 1.2e+02; Matches 6; Conservative 2; Mismatches 2; Indels 0; Gaps 0;	A;Genome: chloroplast A;Genome: chloroplast protein cemA C;Superfamily: maize chloroplast protein cemA C;Keywords: chloroplast; heme; transmembrane protein	A;Status: preliminary A;Molecule type: DNA A;Molecule type: DNA A;Residues: 1-18 <smi> A;Cross-references: EMBL:X54750; NID:g12194; PID:g12198 C:Ganatics</smi>	R;Smith, A.G.; Wilson, R.J.; Kaethner, T.M.; Willey, D.L.; Gray, J.C. submitted to the EMBL Data Library, October 1990 A; Reference number: S14557 A; Accession: S14560	RESULT 1 \$14560 S14560 probable heme-binding protein - garden pea chloroplast (fragment) C;Species: chloroplast Pisum sativum (garden pea) C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 11-Jan-2000 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 11-Jan-2000
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R:Denamur, E.; Chehab, F.F.
Hum. Mol. Genet. 3, 1089-1094, 1994
A:Title: Analysis of the mouse and rat CFTR promoter regions
A:Reference number: I49593; MUID:95072572
A:Accession: I49593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ameletin - rat
c; Species: Rattus norvegicus (Norway rat)
C; Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 07-May-1999
C; Accession: A61411
R; Burzynski, S.R.
Anal. Blochem. 70, 359-365, 1976
Anal. Blochem. 70, 359-365, 1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C:Species: Homo sapiens (man)
C:Date: 02-Jul-1996 #sequence_revision 11-Jul-1996 #text_change 20-Apr-2000
C:Date: 02-Jul-1996 #sequence_revision 11-Jul-1996 #text_change 20-Apr-2000
C:Accession: 152618
R:Oner, R: Oner, C: Wilson, J.B.; Tamagnini, G.P.; Ribeiro, L.M.; Huisman
R: J. Haematol. 79, 306-310, 1991
Br. J. Haematol. 79, 306-310, 1991
                                                                                                          cystic fibrosis transmembrane conductance regulator - C;Specias: Mus musculus (house mouse) C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #tcC;Accession: I49593
                                                                                                                                                                                    RESULT
I49593
                                                                                                                                                                                                                                                                                                                                                                                                                        A:Molecule type: protein
A;Residues: 1-6 <BURN
C;Keywords: pyroglutanic acid
E;1/Modified site: pyrrolidone
 A; Status:
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A;Title: Sequential analysis in subnanomolar
A;Reference number: A61411; MUID:76182447
A;Accession: A61411
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A;Cross-references: GDB:119297;
A;Map position: 11p15.4-11p15.4
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A;Molecule type: DNA
A;Residues: 1-14 <ONE>
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71.48;
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83.3%;
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Pred. No. 4.5e+02;
1; Mismatches 1
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               SKXPLMVKVLD
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A; Molecule type: protein
A; Residues: 1-19 <YAM>
A; Experimental source: tadpole plasma
A; Note: sequence extracted from NCBI
                                                                                                                                                                                                                                                                                    transthyretin - bullfrog (fragment)
N;Alternate names: 3,5,3'-L-triiodothyronine-specific binding protein
C;Species: Rana catesbelana (bullfrog)
C;Date: 19-Dec-1993 #sequence_revision 18-Nov-1994 #text_change 28-App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene CFTR protein - rat (frag
C;Species: Rattus norvegicus
C;Date: 02-Aug-1996 #sequence
                                                                                                                                                                                       A; Reference number: A49192; A; Accession: A49192
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A;Residues: 1-17 <RES>
A;Cross-references: GB:L04873; NID:g414726; PIDN:AAA73562.1; PID:g553892
C;Genetics:
                                                                                                                                                                    A;Status: preliminary
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                                                                                                                                                                                                                                          Endocrinology 132,
                                                                                                                                                                                                                                                             R;Yamauchi, K.;
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A; Residues: 1-17 < RES>
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A; Title: Analysis of the mouse and rat CFTR promoter regions
A; Reference number: 149593; MUID:95072572
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A;Accession: I84733
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 Similarity 45. 5; Conservative
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12, 2254-2261, 1993
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                   24.0%;
45.5%;
                                                                                                                                                                                                      characterization 2; MUID:93238653
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Pred. No. 1.2e+03;
3; Mismatches 7
                 Score 23; I
Pred. No. 1
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Pred. No. 1.2e+03;
                                                                                           backbone
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                                                                                                                                                                                                                                                             Horiuchi,
                   DB 2;
1.9e+03
                                                                                           (NCBIP: 130235)
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Prostaglandin D-synthase - rat (fragment)

RiAlternate names: prostaglandin-H2 D-isomerase
C:Species: Rattus norvegicus (Norway rat)
C:Date: 06-Dec-1996 #sequence_revision 13-Mar-1997 #text_change 31-Oct-1997
C:Accession: S65717
R:Glacomelli, S: Leone, M.G.: Grima, J.: Silvestrini, B.: Cheng, C.Y.
Blochim. Biophys. Acta 1310, 269-276, 1996
A:Title: Astrocytes synthesize and secrete prostaglandin D synthetase in vitro.
A:Reference number: S65716; MUID:96177373
A:Accession: S65717
  A; Molecule type: protein A; Residues: 1-15 <GIA> C; Superfamily: lipocalin;
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Best Local Similarity
"""hes 3; Conserv
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A:Experimental source: T lymphocyte
C:Keywords: T-cell receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R:Casanova, J.L.; Romero, P.; Widmann, C.; Kourilsky, P.; Maryanski, J.L.
J. Exp. Med. 174, 1371-1383, 1991
A;Title: T cell receptor genes in a series of class I major histocompatibility complex-allelic exclusion and antigen-specific repertoire.
A;Reference number: PH0746; MUID:92078846
A;Accession: PH0786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7-cell receptor alpha chain (I7) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C:Accession: PH0786
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PH0786
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A;Title: Pseudomonas aeruginosa cytotoxin-binding protein in A;Reference number: S39049; MUID:94039134
A;Accession: S39049
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C:Species: Oryctolagus cuniculus (domestic rabbit)
C:Date: 18-Feb-1994 #sequence_revision 19-Apr-1996 #text_change 16 Feb-1997
                                                                    A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                S65717
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A; Residues: 1-13 <CAS>
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Superfamily: lipocalin;
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Best Local Similarity
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33.3%;
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Pred. No. 1.9e+03;
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Pred. No. 2e+03;
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                                                                     CTC 75 protein - human (Species: Homo sapiens (man) (Species: Homo sapiens (man) (Species: 27-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 17-Mar-1999 (Spate: 27-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 17-Mar-1999)
R;Genersch,
EMBO J. 14,
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Nucleic Acids Res. 19, 4000, 1991
A;Title: Nucleotide sequence of beta-lactamase regulatory genes from staphylococcal p A;Reference number: S34444; MUID:91319567
A;Accession: S34444
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 30-Jun-1992 #sequence_revision 06-Jan-1995 #text_change 06-Jun-1997
C;Accession: PA0046; PA0042
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A; Residues: 1-16 <WAN>
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A; Accession: PA0046
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: EMBL:M62650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Status: nucleic acid sequence not shown;
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E.; Eckerskorn,
791-800, 1995
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                             Lottspeich,
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Pred. No. 2.2e
2; Mismatches
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Pred. No. 2.2e+03;
3; Mismatches 3
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Pred. No. 2.4e+03;
2; Mismatches 3;
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R-phycoerythrin gamma-B chain - red alga (Gastroclonium coulteri) (fragment) C; Species: Gastroclonium coulteri
C; Species: Gastroclonium coulteri
C; Species: O7-Mar-1988 #sequence_revision O7-Mar-1988 #text_change 23-Mar-1993 C; Accession: G22565
R; Klotz, A.V.; Glazer, A.N.
J. Blol. Chem. 260, 4856-4863, 1985
J. Blol. Chem. 260, 4856-4863, 1985
A; Title: Characterization of the bilin attachment sites in R-phycoerythrin. A; Reference number: A22565; MUID:85182601
A; Accession: G22565
A; Molecule type: protein
A; Residues: 1-13 < KLO>
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A;Accession: S54272
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-18 <GEN>
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FEBS Lett. 310, 37-40, 1992
A;Title: Identification of the three major coeliac immunoreactive proteins and one alpha
A;Reference number: S29207; MUID:92405739
A;Accession: S29209
A;Molecule type: protein
A;Residues: 1-14 <ROC>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  avenin alpha-2 - oat (fragment)
N;Alternate names: CIP-3; coeliac immunoreactive protein 3
C;Species: Avena sativa (oat)
C;Date: 19-Mar-1997 #sequence_revision 24-Jul-1998 #text_change 24-Jul-1998
C;Accession: S29209
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Search completed: December 21, 2000, 08:30:08 Job time: 272 sec
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TL18_SPIOL
PA2B_VIPBO
FFFI_CAVE
B44K_PORGI
MAST_VESBA
EF1A_MICCR
PHSL_DESBN
STYA_STYCL
ULAE_HUMAN
UTAE_HUMAN
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Result No.

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Q52093 pigeon pea	P01514 vespu	P99013 sacch	P81095 bacil	P21996 rattu	P80431 rattu	P13269 enter		P25423 melolontha		P81422 acinetobac	٠.
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ALIGNMENTS

R R R O O O O D D D D D D D D D D D D D	ь S	
RESULT 2 PA21_MICFM STANDARD; PRT; 12 AA. ID PA21_MICFM STANDARD; PRT; 12 AA. AC P25072; DT 01-MAY-1992 (Rel. 22, Created) DT 15-DEC-1998 (Rel. 37, Last sequence update) DT 15-DEC-1998 (Rel. 37, Last annotation update) DE PHOSPHOLIPASE A2 ISOZYME 1 (EC 3.1.1.4) (PHOSPHATIDYLCHOLINE DE 2-ACYLHYDROLASE) (FRAGMENY). OS Micrurus fulvius microgalbineus (Mexican coral snake). OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutcleost OC Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea; RN [1] RP SEQUENCE. RC TISSUE-VENOM;	Query Match 25.0%; Score 24; DB 1; Length 18; Best Local Similarity 71.4%; Pred. No. 3.7e+02; Matches 5; Conservative 0; Mismatches 2; Indels Qy 2 TVQASYS 8	RESULT 1 UC21_MAIZE STANDARD; PRT; 18 AA. AC P80677; DT 01-OCT-1996 (Rel. 34, Created) DT 01-OCT-1996 (Rel. 34, Last sequence update) DT 01-OCT-1996 (Rel. 38, Last sequence update) DT 15-JUL-1999 (Rel. 38, Last sequence update) DT 15-JUL-1999 (Rel. 38, Last sequence update) DT UNKNOWN PROTEIN FROM 2D-PAGE OF ETIOLATED COLEOPTILE (SPOT (FRAGMENT). OS Zea mays (Maize). OC Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Sperma OC Magnoliophyta; Liliopsida; Poales; Poaceae; Zea. RN [1] RP SEQUENCE. RA TOUZET P., Riccardi F., Morin C., Damerval C., Huet JC., RA TOUZET P., Riccardi F., Morin C., Damerval C., Huet JC., RA TOUZET P., Riccardi F., Morin C., Damerval C., Huet JC., RA TOUZET P., Riccardi F., Morin C., Damerval C., Huet JC., RA TOUZET P., Riccardi F., Morin C., Damerval C., Huet JC., RA TOUZET P., Siccardi F., Morin C., Damerval C., Huet JC., RA TOUZET P., C., Zivy M., de Vienne D.; RT genome analysis program."; RT genome analysis program."; RT genome analysis program."; RT GENOME ANALYSIS PROGRAM SESS. CC -i- MISCELLANEOUS: ON THE 2D-GEL THE DETERMINED PI OF THIS CCINTLARTY: TO L-ASCORBATE PEROXIDASES. DR HSSP; P46534; 1APX. DR MAIZE-2DPAGE; P80627; COLEOPTILE. RAIZEDB; 123953; FT NON_TER 18 18 18 1938 MW; F32F6FEF038BABBA CRC64; SQ SEQUENCE 18 AA; 1938 MW; F32F6FEF038BABBA CRC64;
TIDYLCHOLINE nake). ta; Eutoleostomi; Colubroidea;		m <u>p</u> <u>c</u>

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                                                                                                                                                                                                                                                                                                                                                                                                                          *Purification of a cytochrome P450 isozyme belonging to a subfamily of P450 IIB from liver microsomes of guinea pigs.";
Biochem. Biophys. Res. Commun. 172:607-613(199).
-!- FUNCTION: CYTOCHROMES P450 ARE A GROUP OF HEME-THIOLATE MONOOXYCENASES. IN LIVER MICROSOMES, THIS ENZYME IS INVOLVED IN NADPH-DEPENDENT ELECTRON TRANSPORT PATHWAY. THIS ISOZYME IS ACTI UPON P. NITROANISOLE, ANILINE, D-BENZCHFTAMINE, DELTA(9)-
TETRAHYDROCANNABINOL (THC) AND STRYCHNINE.
-!- CATALYTIC ACTIVITY: RH + REDUCED FLAVOPROTEIN + O(2) = ROH + OXIDIZED FLAVOPROTEIN + H(2)O.
-!- SUBCELLULAR LOCATION: MEMBRANE-BOUND. ENDOPLASMIC RETICULUM.
-!- SUBCELLULAR LOCATION: MEMBRANE-BOUND. ENDOPLASMIC RETICULUM.
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smith).";
smith).";
-i-chem. J. 179:603-606(1979)
-i-chem. J. 202 CATALYZES T
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01-FEB-1994 (Rel. 28, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
CYTOCHROME P450IIB (EC 1.14.14.1) (FRAGMENT).
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PROSITE; PS00119; PA2_ASP; PARTIAL.
Hydrolase; Lipid degradation; Calcium;
NON_TER 12 12
SEQUENCE 12 AA; 1398 MW; CC21992A89
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-!- CATALYTIC ACTIVITY: PHOSPHAGIDYLCHOLINE + H(2)O = 1-ACYLGLYC PHOSPHOCHOLINE + A FATTY ACID ANION.
-!- SIMILARITY: BELONGS TO THE PHOSPHOLIPASE A2 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=HARTLEY; TISSUE-LIVER;
MEDLINE; 9154472.
Narimatsu S., Akutsu Y., Matsunaga T., Watanabe
Yoshimura H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cavia porcellus (Guinea pig).
Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 79255521.

Possani L.D., Alagon A.C., Fletcher P.L. Jr., Varela M.J., Julia J "Purification and characterization of a phospholipase A2 from the "purification and characterization of the coral snake, Micrurus fulvius microgalbineus (Brown a venom of the coral snake, Micrurus fulvius microgalbineus (Brown a venom of the coral snake, Micrurus fulvius microgalbineus (Brown a venom of the coral snake, Micrurus fulvius microgalbineus (Brown a venom of the coral snake, Micrurus fulvius microgalbineus (Brown a venom of the coral snake, Micrurus fulvius microgalbineus (Brown a venom of the coral snake, Micrurus fulvius microgalbineus (Brown a venom of the coral snake)
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Microsome; Endoplasmic reticulum.
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Pred. No.
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6.3e+02;
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Castello P.R., Franco M.A., Rossi J.P.F.C.
"Identification of Bordetella pertussis vi
membrane proteins.";
FEMS Microbiol. Lett. 172:9-13(1999).
Outer membrane; Virulence.
NON TER 20 20
SEQUENCE 20 AA; 2116 MW; D24E1CDCA6652
                                                                                                                                                                                                                                                                            XYNB_DICB4 STANDARD
P80717;
01-NOV-1997 (Rel. 35, C
01-NOV-1997 (Rel. 35, L
01-NOV-1997 (Rel. 35, L
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VR90_BORPE
P81549;
15-JUL-1999
15-JUL-1999
                                                                                                                                                                                  Submitted
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01-NOV-1997 (Rel. 35, Last annotation update)
ENDO-1,4-BETA-XYLANASE B (EC 3.2.1.8) (XYLANASE
(1,4-BETA-D-XYLAN XYLANOHYDROLASE B) (FRAGMENT).
Dictyoglomus sp. (strain B4A).
                                                                                                  Xylan de
                                                                                                    INTERPRO; IPR001000; ..
INTERPRO; IPR00591; GLYCOSYL_HYDROL_F10; PARTIAL.
PROSITE; PS00591; Hydrolase; Glycosidase.
                                                                                                                                                  LINKAGES IN XYLANS.
-!- PATHWAY: XYLAN DEGRADATION.
-!- SIMILARITY: BELONGS TO CELLULASE
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KKTILDLKD
                                       Similarity 5; Conserv
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57
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                                      Score 21; DB 1;
Pred. No. 6.8e+02;
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RESULT 8
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01-JUN-1994
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17 KDA MILK
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NON_TER 20 20
SEQUENCE 20 AA; 2192 MW; 752
                                                                                                                                                                                                                                                                                              Kieselbach T., Bystedt M., Schroeder W.P.;
Submitted (MAY-2000) to the SWISS-PROT data bank
-!- SUBCELLULAR LOCATION: CHLOROPLAST THYLAKOID N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SPIOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE.
TISSUE-MILK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein; Milk.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Soerensen E.S., Petersen T.E.; Purification and characterization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MI17_BOVIN
P35451;
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- PTM: N-GLYCOSYLATED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. Dairy Res. 60:189-197(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 93308294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bovidae;
                                                                                                                                                                                           Local
                                                                                                                                                                                                            Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 TTVQASYSKKKLFLSLL
                                                                                                                                            TTVQASYSKKKLF
                                                                                                              TPLQSKVTNKVVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPIOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSXQPQSQNPKLPLSIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6; Conserv
                                                                                                                                                                           Similarity
4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bovinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
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   (Rel.
                                                                                                                                                                            Conservative
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0 AA;
                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
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29, Last
29, Last
                                                                                                                                                                                                                                                                                                                                                                                                                                        40, Created)
40, Last sequence update)
40, Last annotation update)
18 KDA PROTEIN (P18) (FRAGM
   26,
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2233
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30
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    Created)
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                                                                                                                                                                                        .9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence up
annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 21; DB
Pred. No. 1.46
3; Mismatches
                                                                                                                                                                                          Score
Pred.
                                                                                                                                                                                                                                                        752C21963F49FA64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4CCA589404C62C27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of three poorine milk.
                                                                                                                                                                                           NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 update)
on update)
                                  12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
1.4e+03
                                                                                                                                                                                                          DΒ
                                                                                                                                                                      лв т.
4.4e+03;
5;
                                  AA
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k.";
                                                                                                                                                                                                                                                        CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . 8
                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                      MEMBRANE
                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             isolated
                                                                                                                                                                                                                                                                                                                                                                                                            Spermatophyta;
                                                                                                                                                                                                            <u>د</u>ر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bovoidea;
                                                                                                                                                                                                                                                                                                     LUMEN
                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             from
                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
FGF1_CANFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 4
                                                                                                                                                                                                                                MEDLINE: 89231704.
Quinkler W., Maasberg M., Bern Sharma H.S., Schaper W.;
"Isolation of heparin-binding
                                                                                                                                                                                                                                                                                                                                                                            FGF1_CANFA STANDARD; PRT; 15 AA.

P18651;

01-NOV-1990 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
HEPARIN-BINDING GROWTH FACTOR 1 (HBGF-1) (ACIDIC FIBROBLAST GROWTH FACTOR) (ARGF) (ALPHA-ENDOTHELIAL CELL GROWTH FACTOR) (FRAGMENT).

FGF1 OR FGF-1.
                                                                                                                                                                                          Eur.
                                                                                                                                                                                                                                                                                                                             Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata; (
Mammalia; Eutheria; Carnivora;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hydrolase; Lipid degradation; NON_TER 12 12 SEQUENCE 12 AA; 1412 MW; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SINGHES: Vipera berus.";
Biochimie 55:1031-1045(1973).
Biochimie 55:1031-1045(1973).
-i- FUNCTION: PAZ CATALYZES THE CALCIUM-DEPENDENT HYDROLYSIS OF 2-ACYL GROUPS IN 3-SN-PHOSPHOGLYCERIDES.
-i- CATALYTIC ACTIVITY: PHOSPHATIDYLCHOLINE + H(2)O - 1-ACYLGLYC
                                                                                                                                                                                                                    canine hearts.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Purification and physiochemical, che of a toxic A2 phospholipase isolated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniat
Lepidosauria; Squamata; Scleroglossa;
Viperidae; Viperinae; Vipera.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-1993 (Rel. 26, Last s
15-DEC-1998 (Rel. 37, Last a
PHOSPHOLIPASE A2, BASIC (EC
2-ACYLHYDROLASE) (FRAGMENT).
                  INTERPRO; IPRO02209; PROSITE; PS00247; HE
                                              HSSP; P05230;
                                                            PIR; S03955; S03955.
                                                                             THAN DOES BFGF.
                                                                                                         <del>-</del> - <del>-</del> -
                                                                                                                                                                                                                                                                                                     SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Delori P.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-VENOM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Vipera berus orientalis (Viper)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15 SLLDF 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 SLLEF
                                                                                                                                   . J. BIOCHEM. 181:67-73(1989).
FUNCTION: THE HEPARIN-BINDING GROWTH FACTORS ARE ANGIGGENIC IN VIVO AND ARE POTENT MITOGENS FOR A VARIETY OF CELL TYPES VITRO. THERE ARE DIFFERENCES IN THE TISSUE DISTRIBUTION AND CONCENTRATION OF THESE 2 GROWTH FACTORS.
                                                                                                            MISCELLANEOUS:
                                                                                                                             SUBUNIT: MONOMER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY: BELONGS TO THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PHOSPHOCHOLINE + A FATTY ACID ANION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
4; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
 Mitogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26, Last sequence update)
37, Last annotation update)
BASIC (EC 3.1.1.4) (PHOSPHATIDYLCHOLINE
              HBGF_FGF;
                                                                                                            THIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Vipera.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . 88;
                                                                             то
Vascularization; Heparin-binding
                                                                                                           PROTEIN BINDS
                                                                                                                                                                                                                                                                     Bernotat-Danielowski
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PARTIAL.
on; Calcium;
                                                                             THE
                PARTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 20; DB Pred. No. 1.2e 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  D054351A89969879
                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; ; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata; Vertebrata; Euteleostomi;
oglossa; Serpentes; Colubroidea;
                                                                                                                                                                                                                                      growth factors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PHOSPHOLIPASE
                                                                             HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chemical and biological properties ted from the venom of viperidae
                                                                                                         HEPARIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Venom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . 2e+03
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A2 FAMILY

THE

CRC64;

Length 12

Indels

0

Gaps

0;

from

bovine,

porcine

and

GROWTH

FACTORS

ALTHOUGH LESS

STRONGLY

s.,

Luethe

Euteleostomi; Canis.

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A TENERAL PROPERTIES OF THE PROPERTY OF THE PR
  B44K_PORGI
                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
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RIPK_TRIKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SS
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Best Local S
Matches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 4; Conser
                                                                                                                                                                                                                                                    B44K_PORGI
P81886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RIPK_TRIKI STANDARD; PRT; 16 AA. P16093; 01-APR-1990 (Rel. 14, Created) 01-APR-1990 (Rel. 14, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation update) RIBOSOME-INACTIVATING PROTEIN TRICHOKIRIN (RRNA 1 (EC 3.2.2.22) (FRAGMENT).
Trichosanthes kirilowii (Mongolian snake-gourd).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON_TER
SEQUENCE
                                             SEQUENCE.
STRAIN-VPB 3492;
                                                                                                                                                       30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
44 KDA IMMUNOGENIC PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 89005108.
Casellas P., Dussossoy D., Falasca A.I., Barbieri L.,
Guillemot J.C., Ferrara P., Bolognesi A., Cenini P., Stir
"Trichokirin, a ribosome-inactivating protein from the se
"Trichosanthes kirilowii Maximowicz. Purification, partial
                            MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               characterization and use for preparation of immunotoxins."; Eur. J. Biochem. 176:581-588(1988).
-i- CATALYTIC ACTIVITY: ENDOHYDROLYSIS OF THE N-GLYCOSIDIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae; eurosids I; Cucurbitales; Cucurbitaceae; Trichosanthes.
    Norris
                                                                                                                 Porphyromonas
Bacteria; CFB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Protein synthesis inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-SEED;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                                           5 ASYSK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY: TO OTHER BACTERIAL AND PLANTS PROTEINS. BELONGS TO TYPE 1 RIP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PTM: GLYCOSYLATED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SPECIFIC ADENOSINE ON THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SYSKKKL 12
                                                                                                                                                                                                                                                                                                                                                                                                ASYEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S01669; S01669
E; 20198497.
J.M., Love D.N.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity 80.4
4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PS00275; SHIGA_RICIN; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IPR001574;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA;
                                                                                                               gingivalis (Bacteroides gingivalis).
group; Bacteroidaceae; Porphyromonas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA;
                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16
1605 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15
1732 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20.8%;
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80
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hydrolase;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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1.7e+03;
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1.5e+03;
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RRR RP OCC OCT DIT
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                                                            Microplitis croceipes.
Microplitis croceipes.
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecteukaryota; Meoptera; Endopterygota; Hymenoptera; Apocrita;
Pterygota; Neoptera; Endopterygota; Hymenoptera; Apocrita;
                                                                                                                  EF1A_MICCR STANDARD; PRT; 15 AA. P81266; P81266; P5-JUL-1998 (Rel. 36, Created) 15-JUL-1998 (Rel. 36, Last sequence update) 15-DEC-1998 (Rel. 37, Last annotation update) ELONGATION FACTOR 1-ALPHA (EF-1-ALPHA) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WASDUFANA, ... PARADIS (Hornet).
Vespa basalis (Hornet).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Eukaryota; Neoptera; Endopterygota; Hymenoptera; Apocrita; Ac
Pterygota; Neoptera; Endopterygota; Hymenoptera; Apocrita; Ac
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P21654; 
01-MAY-1991 (Rel. 18, Created) 
01-MAY-1991 (Rel. 18, Last sequence up 
01-AUG-1992 (Rel. 23, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 _VESBA
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NON_TER
Stuart M.K.;
"An antibody diagnostic homologue of elongation
                                                                                                                                                                                                                                                                                                                                                                                                   LO C.-L., Hwang L.-L.;

"Structure and biological activities of a n
from the venom of the hornet Vespa basalis.
Biochem. J. 274:453-456(1991).
-1- FUNCTION: MAST CELL DEGRANULATING PEPTI
THAT COUPLE TO PHOSPHOLIPASE C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Serum antibody responses of cats to soluble vielline porphyromonas gingivalis."; Vet. Microbiol. 73:37-49(2000).
-!- SIMILARITY: TO P.GINGIVALIS HEMAGGLUTININ
                                                                                                                                                                                                                                                                                                                                                                                Mast
                                     MEDLINE;
                                                 SEQUENCE.
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MEDLINE; 91174755.
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3; Conservative
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57.1%;
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37.5%;
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Best Local
Matches
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Setterquist R.A., Smith G.K., Oakley T.H., Lee Y.H.,

Sequence, overproduction and purification of Vibrio
ribosomal protein L18 for in vitro and in vivo studie
Gene 183:237-242(1996).

MITTE DECEMBER BINDS DIRECTLY TO 23S RIBG
                                                                                                                                             INTERPRO; IPRO02358; -.
PROSITE; PS00525; RIBOSOMAL_L6_1; PARTIAL.
The sound protein; rRNA-binding.
                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RL6_VIBPR
Q56715;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vibrio proteolyticus (Aeromonas proteolytica).
Bacteria; Proteobacteria; gamma subdivision; Vibrionaceae; Vibrio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-DEC-1998
15-DEC-1998
15-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Elongation factor; Protein biosynthesis; GTP-binding NON_TER 15 15 15 SEQUENCE 15 AA; 1670 MW; 1EB7DA05B09B3751 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Arch. Insect Biochem. Physiol. 39:1-8(1998).

-I. FUNCTION: THIS PROTEIN PROMOTES THE GTP-DEPENDENT BINDING AMINOACYL-TRNA TO THE A-SITE OF RIBOSOMES DURING PROTEIN BIOSYNTHESIS (BY SIMILARITY).

-I. SUBCELLULAR LOCATION: CYTOPLASMIC (BY SIMILARITY).

-I. SIMILARITY: BELONGS TO THE GTP-BINDING ELONGATION FACTOR EFTU/EF-1A SUBFAMILY.
                                                                                                                                                                                                         EMBL; U38943; AAB41328.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-ATCC 15338;
MEDLINE; 97149305.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INTERPRO; IPRO00795; -.
PROSITE; PS00301; EFACTOR_GTP; PARTIAL.
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SIMILARITY: BELONGS TO THE L6P FAMILY OF RIBOSOMAL PROTEINS.
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VRTKEAKKK 16
                           VQASYSKKK 11
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2; Conservative
                                                       Similarity
4; Conserv
                                                      19.8%;
nilarity 44.4%;
Conservative
                                                                                                                                  16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Rel. 37, Created)
(Rel. 37, Last sequence update)
(Rel. 37, Last annotation update)
AL PROTEIN L6 (FRAGMENT).
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20.0%;
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                                                      Score 19; DB 1; L, Pred. No. 2.5e+03; 2; Mismatches 3;
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7.3e+03·
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DT 01-JAN
DT 15-DEC
DE PERIPL
DESULT
OC Bacter
RN [1]
RP SEQUEN
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RC -!- SU
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                                                                                                                                                                                                                                                                   NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Desulfovibrio.";
Biochem. Biophys. Res. Com
-i- CATALYTIC ACTIVITY: 2
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Prickril B.C., He S.H., Li C., Menon N., Choi E.
Dervartanian D.V., Peck H.D. Jr., Fauque G., le
Moura I., Moura J.J.G., Patil D., Huynh B.H.;

"Identification of three classes of hydrogenase
                                                                                                                                                                                                                                                                                                                  INTERPRO; IPRO01501; -.

PROSITE; PS00507; NI_HGENASE_L_1; PARTIAL.

PROSITE; PS00508; NI_HGENASE_L_2; PARTIAL.

Oxidoreductase; Periplasmic; Nickel; Selen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Desulfovibrio baculatus (strain Norway 4). Bacteria: Proteobacteria; delta subdivision;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBUNIT FAMILY.
H27480; H27480.
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COFACTOR: ONE NICKEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY: BELONGS TO THE [NIFE]/[NIFESE] HYDROGENASE LARGE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SELENOCYSTEINE
                                                     ASYSKKKL
AADGKKKI 14
                                                                                                                                           Similarity
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                                                                                                                 Conservative
                                                                                                                                                                                                                                                                   1942 MW;
                                                                                                                                           19.8%;
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                                                                                                                 2
                                                                                                                                           Score 19;
Pred. No.
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                                                                                                                 Mismatches
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                                                                                                                                       DB 1;
3e+03;
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                                                                                                                                                                                                                                                                                                                        Selenocysteine.
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Search completed: Job time: 443 sec December 21, 2000, 08:33:00

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RESULT

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Minimum
Maximum
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          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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seq length:
          protein search, using
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1: sp_archea:*
2: sp_bacteria
3: sp_fungi:*
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8:
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12:
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14:
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Match Length
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Listing first 45 summaries
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Gapop 10.0 ,
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Copyright (c) 1993 - 2000
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          sp_phage: *
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Q9UCH4
Q06514
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Q9TRA2
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Q9RLU4
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Compugen Ltd
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11.880 Million cell updates/sec
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P78533 homo sapien
Q9ud41 homo sapien
Q9tra2 sus scrofa
                                                                                                  006514 escherichia
Q9r4e9 rhodopseudo
P78199 escherichia
Q56610 vibrio chol
Q9qvb0 rattus sp.
Q9ts18 oryctolagus
P82138 spinacia ol
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Q9z170
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Q9trf3
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Q9rlu4 lactococcus
P97522 rattus norv
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Q9uch4 homo sapien
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Q46390	Q9ZY77	Q79458	Q9S8A4	Q9R4L0	Q47605	Q9R4Y0	068425	Q62355	Q62354	Q9PRP1	Q86942	Q86941	Q86940	Q86939	086938	Q86937	Q86936	Q86935	Q37868	Q49448	Q92321	09QUZ8	Q9R5Q6	054970	Q45852
	Q9zy77 trissolcus	Q79458 human immun	4	Q9r410 spiroplasma	Q47605 escherichia		O68425 buchnera ap	Q62355 mus musculu		Q9prp1 gallus gall		human	human	human	human	human		5		Q49448 mycoplasma	Q92321 saccharomyc	Q9quz8 rattus sp.	Q9r5q6 burkholderi	0	Q45852 clostridium

ALIGNMENTS

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RESULT
Q9RLU4
ID Q5
AC Q5
DT 0
DT 0
DT 0
DT 0
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Best Local
Q9RLU4 PRELIMINARY; PRT; 19 AA.

Q9RLU4;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
NISG PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q02414 PRELIMINARY; PRT; 18 AA. Q02414; Q1-NOV-1996 (TrEMBLrel. 01, Created) Q1-NOV-1996 (TrEMBLrel. 01, Last sequence update) Q1-NOV-1998 (TrEMBLrel. 08, Last annotation update) QROTIDINE-5'-MONOPHOSPHATE DECARBOXYLASE (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                 Curr. Genet. 27:536-540(1995).

EMBL; S79674; AAB35350.1; -

NON_TER 1 1

SEQUENCE 18 AA; 1891 MW; E.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        awamori."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gouka R.J., Hessing J.G., Stam H., Musters W., Hondel C.A.; "A novel strategy for the isolation of defined pyrG mutants and the development of a site-specific integration system for Aspergillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 96031709.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aspergillus awamori.
Eukaryota; Fungi; As
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7; Conserv
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41.28;
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                                                                                                                                                                                                                                                                                                        Score 26; DB 3; Length 18; Pred. No. 8.1e+02; 1; Mismatches 9; Indels
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P97522
P977522
P977522
P97752

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Best Local S
Matches 7
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Best Local S
Matches 5
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01-MAY-1997
01-MAY-1997
01-AUG-1998
              Q9UREO PRELIMINARY; PRT; 15 AA. Q9UREO; (71 EMBLrel 13, Created) 01-MAY-2000 (TrEMBLrel 13, Last sequence up 01-MAY-2000 (TrEMBLrel 13, Last annotation TYPE II TOPOISOMERASE, TOPOISOMERASE II. Saccharomyces cerevisiae (Baker's Yeast).
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NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.

Vuillaumier S., Denamur E.;

Vuillaumier S., Denamur E.;

Submitted (FEB-1996) to the EMBL/GenBank/DDBJ databases.

EMBL; X95927; CAA65168.1; -.

SEQUENCE 18 AA; 2158 MW; 5C5855056ClCE6DE CRC64;
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[2]
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STRAIN-M8; TRANSPOSON-TN5481;
Immonen T., Wahlstroem G., Takala
"Evidence for a mosaic structure
    Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=N8; TRANSPOSON=TN5481;
Immonen T., Saris P.E.J.;
"Characterization of the nisFEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lactococcus lactis.
Plasmid pLEB513.
Bacteria; Firmicutes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P97522
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                                                                                                                                                                                                                                                                                                                    Similarity 7; Conserv
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Fungi;
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  Ascomycota;
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2139
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41.78;
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07,
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Last annotation update)
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Pred. No. 1.2e
4; Mismatches
                                                                                                                                                                                                                                                                                                                      4
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Pred.
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Saccharomycetes; Saccharomycetales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rat
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1.2e+03
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Lactococcus
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RESULT Q9UCH4
ID Q9
AC Q9
DT 01
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Matches 6
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Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 93215001.
Shau H., Gupta R.K., G
"Identification of a n
erythroid cells.";
Cell. Immunol. 147:1-1
SEQUENCE 15 AA; 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. Elsea S.H., Hsiung J. Biol. Chem. 270: SEQUENCE 15 AA;
                                                                                                                                                                          006514;
006514;
01-JUL-1997
01-JUL-1997
01-JUL-1997
DNA, MOSAIC
 NON_TER
SEQUENCE
                                                                  SEQUENCE FROM N.A.
STRAIN-CH210; TRANSPOSON-TN5059;
MEDLINE; 97303088.
Nikiforov V., Kholodii G., Minakhin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9UCH4 PRELIMINARY; PRT; 15 AA.
Q9UCH4;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
NATURAL KILLER ENHANCING FACTOR, NKEF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Saccharomycetaceae; [1]
                            "Intercontinental spread of prom in environmental bacteria."; mol. Microbiol. 24:321-329(1997)
                     EMBL;
                                                                                                                                   Escherichia coli.
Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (Human)
                                                             Mindlin S., Nikiforov V
                                                                                                                          Escherichia
                                                                                                                                                                  (MER-OPERON) 1040
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Local S
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                    Y09026; CAA70241.1;
                                                                                                                                                                                                                                                                                                                      Similarity 6; Conserv
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4; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Metazoa;
 18
                                                                                                                                                                (TremBLrel. 04, Created)
(TremBLrel. 04, Last sequence update)
(TremBLrel. 04, Last annotation update)
MERCURY RESISTANCE TRANSPOSABLE ELEMENT)
)1040 BP (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hsiung Y., Nitiss J.L., Osheroff N.;
em. 270:1913-1920(1995).
15 AA; 2094 MW; OA6A37F6E81E85F6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                       Conservative
 AA;
                                                                                                                                                                                                                                                                                                                                                                      147:1-11(1993).
AA; 1738 MW; 4909D4A793D382BF
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  1899
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 MW.
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Pred. No. 1.5e
1; Mismatches
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Pred. No. 1.5e
3; Mismatches
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killer
 484A2D7197814DF9
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Catarrhini;
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1.5e+03;
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1.5e+03;
                                                   mercury-resistance
                                                                       Gorlenko
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hominidae;
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 CRC64;
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Best Local
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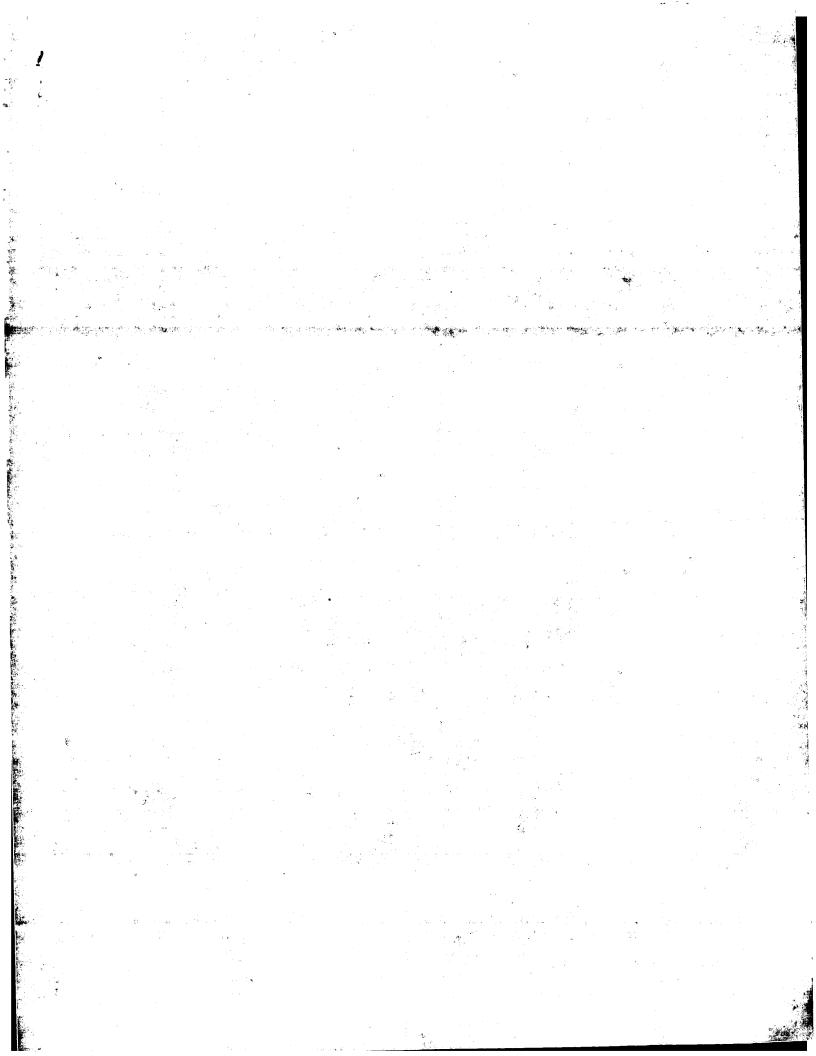
"Construction of a contiguous 874-kb sequence of the Foothers."
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01-FEB-1997
01-NOV-1999
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**Ruver J., Xu Y., Gibson J.;
**Metabolism of cyclohexane carboxylic acid by interpretabolism of cyclohexane palustris.";
**Arch. Microbiol. 164:337-345(1995).
**Arch. Microbiol. 164:337-345(1995).
**CROHENCE 20 AA; 2259 MW; 870D483384D44315
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Rhodopseudomonas palustris.
Bacteria; Proteobacteria; al
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MEDLINE; 97
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Kuver J., Xu Y.,
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3; Mismatches
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Ezaki J., Himeno M., Kato K.;
Ezaki J., Himeno M., Kato K.;
"Purification and characterization
lysosomal membranes.";
J. Biochem. 112:33-39(1992).
SEQUENCE 18 AA; 2008 MW; 8314B/
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CYTOTOXIN-BINDING PROTEIN (FRAGMENT).
Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Bukaryota; Metazoa; Chordata; Leporidae; Oryctolau
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"Pseudomonas aeruginosa cytotoxin-binding protein in rabbit
erythrocyte membranes. An oligomer of 28 kDa with similarity
transmembrane channel proteins.";
Eur. J. Biochem. 217:1123-1128(1993).
SEQUENCE 20 AA; 2414 MW; 40B82D7DB5283D2D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9TS18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P82138;
01-JUN-2000 (TrEMBLrel. 14, Created)
01-JUN-2000 (TrEMBLrel. 14, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
CHLOROPLAST 30S RIBOSOMAL PROTEIN S15 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-CV. ALMARO; TISSUE-LEAF;
STRAIN-CV. ALMARO; TISSUE-LEAF;
STRAIN-CV. ALMARO; TISSUE-LEAF;
STRAIN-CV. ALMARO; TISSUE-LEAF;
Tamaguchi K., von Knoblauch K., Subramanian A.R.;
Tidentification of all the proteins in the small subunit or angular to corganelie (chloroplast) ribosome.";
J. Biol. Chem. 0:0-0(2000).
I- FUNCTION: THIS PROTEINS BINDS DIRECTLY TO 16S RIBOSOM.
I- SUBCELIULAR LOCATION: CHLOROPLAST AND OTHER PLASTIDS.
I- TISSUE SPECIFICITY: EXPRESSED IN ALL PLANT TISSUES.
I- TISSUE SPECIFICITY: BELONGS TO THE S15P FAMILY OF RIBOSOMAL PLANTED CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Magnoliophyta;
Chenopodiaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; Caryophyllidae; Caryophyllales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Spinacia oleracea (Spinach).
Chloroplast.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P82138
                                                                                                                                                                                                                                                                                           Ribosomal protein;
NON_TER 20
SEQUENCE 20 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                          008806
                                                                                                                                                                                                                                                                                                                                                     INTERPRO; IPR000589; -.
PROSITE; PS00362; RIBOSOMAL_S15;
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                                                                                                                      KKNSFISVI
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4; Conser
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4; Conservative
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2294 MW;
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44.4%;
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                                                                                                                                                                                                 Score 23; DB Pred. No. 2.96 3; Mismatches
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                                PRT;
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ae; Oryctolagus
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2.9e+03;
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2.9e+03
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Matches 5
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SPI14.
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01-MAY-1997
01-MAY-1997
01-AUG-1998
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SEQUENCE
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NON_TER
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NON_TER
SEQUENCE 15
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01-MAY-2000 (
01-JUN-2000 (
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                                                                                                                                                                                                                                                                                                                     11 KLFLSLL
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AC DT DT DT DT DE GN OS OC OC RN RP RA RL DR RT TT TRA
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01-JUL-1997 (TrEMBLrel. 04, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-NOV-1999 (TrEMBLrel. 12, Last annotation update)
SERINE PROTEASE INHIBITOR 14 (SERINE PROTEINASE INH
                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-1997 (TrEMBLrel. 03, Created)
01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
01-AUG-1998 (TrEMBLrel. 07, Last annotation updat
DEOXYGUANOSINE KINASE (EC 2.7.1.113) (FRAGMENT)
                               01-MAY-2000 (TrEMBLrel. 13, (
01-MAY-2000 (TrEMBLrel. 13, I
01-JUN-2000 (TrEMBLrel. 14, I
BETA-ISOFORM THYROID HORMONE
                                                                                                                                                                                                                                                                                                Homo sapiens (Human)
Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
Homo sapiens (Human).
Eukaryota; Metazoa; C
Mammalia; Eutheria; F
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VAASAGKIILFSSMV
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7; Conser
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                                                                                                                                                                                                         Similarity 71., 5; Conservative
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; Metazoa; Chordata;
Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                           Eutheria;
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Primates;
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46
   Primates;
               Chordata;
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Pred. No. 2.9e
2; Mismatches
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                                                                                                                                                                                                          Score 22; DB Pred. No. 3.2e 1; Mismatches
                                                                                                                                                                                                                                                                                                                  EMBL/GenBank/DDBJ databases
+ DEOXYGUANOSINE = ADP + DG
                                      Last sequence update)
Last annotation update)
IE RECEPTOR (FRAGMENT).
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                                                                         Created)
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Sciurognathi; Muridae;
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                                                                                                                                                                                                                                                                                                                                                                         Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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                                                                                                  PRT;
               Craniata; Vertebrata; Euteleostomi;
     Catarrhini;
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3.2e+03
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     Hominidae;
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Murinae; Mus
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Result
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Perfect score:
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       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,
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BC
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seq length:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Issued_Patents_AA:*
1: /ggn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
5: /cgn2_6/ptodata/2,
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Listing first 45 summaries
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Copyright (c) 1993 - 2000
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/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/ECTUS_COMB.pep:*
/cgn2_6/ptodata/2/iaa/pCTUS_COMB.pep:*
/cgn2_6/ptodata/2/iaa/backfiles1.pep:*
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US-08-621-259A-219

US-08-621-803-228

US-08-621-803-220

US-08-621-803-220

US-08-621-259A-220

US-08-621-660A-33

US-08-261-660A-42

PCT-US94-06931-42

US-08-311-611A-15

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US-08-311-611A-34
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US-08-372-783-40
US-08-372-105-40
US-08-306-473A-40
US-08-209-762-40
US-08-621-803-39
US-08-621-803-39
US-08-621-259A-13
US-08-621-259A-13
US-08-621-259A-13
US-08-621-259A-13
US-08-621-259A-13
US-08-621-259A-14
PCT-US95-00498-40
PCT-US95-00498-40
PCT-US95-00498-40
PCT-US95-00498-40
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Compugen Ltd
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40, Appl
522, Appl
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US-08-311-611A-40
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APPLICANT:
APPLICANT:
                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 6300 Se
CITY: Chicago
STATE: Illinoi:
COUNTRY: USA
                                                                   TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                    LENGTH:
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                                                                                                   14 amino acids
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PCT-US95-09262-62	US-08-372-783-34	US-08-372-783-33	US-08-372-783-15	US-08-311-611A-142	US-08-311-611A-122	US-08-311-611A-110	US-08-311-611A-109	US-08-311-611A-107	US-08-311-611A-106	US-08-311-611A-91	US-08-311-611A-89	US-08-311-611A-81	US-08-311-611A-46	US-08-311-611A-45	US-08-311-611A-44	US-08-311-611A-36
Sequence 62, Appl	34,	33 ,	15,	142,	122,	110,	109,	107,	106,	91,	89,	81,	46,	45,	44,	Sequence 36, Appl

ALIGNMENTS

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REFERENCE/DOCKET NUMBER: 3225
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 40:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:

ZIP: 60606-6402
COMPUTER READABLE FORM:
COMPUTER FLOADBLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/311
ETLING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273,40
ETLING DATE: 11-7UL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/125,65
ETLING DATE: 22-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REGISTRATION NUMBER: 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lambert, Jr., Lewis H.
TITLE OF INVENTION: Method for Treating Gram-Negative Bacterial
TITLE OF INVENTION: Infection by Administration of
TITLE OF INVENTION: Bactericidal/Permeability-Increasing
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
NAME/KEY: misc_feature OTHER INFORMATION: "BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0, Application US/08311611A 5523288
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6300 Sears Tower,
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Kung, Ada H.C.
            "BPI.38"
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lower, 233
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CENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 08/209
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/183
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Rin-Laures, Li-Hsien
                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-300
TELEPAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/209,762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                               MOLECULE TYPE:
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                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
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                                                                    Local Similarity nes 5; Conserv
                                       12 GWIKQLF 18
                                                                                                                                                                                                                                                                                                                                                                                  NAME: Rin-Laures, Li-Hsien REGISTRATION NUMBER: 33,547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Chicago
                                                                                                                                                               NAME/KEY: misc_feature
OTHER INFORMATION: "XMP.38"
                                                                                                                                                                                                                             TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
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                      60606-6402
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                                                                                                                                                                                                                                                         14 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Little, Roger G.
VENTION: Anti-Gram-Positive Bacterial Methods
                                                                      Conservative
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                                                                                   30.3%;
71.4%;
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                                                                                   Score 33;
Pred. No.
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Pred. No.
                                                                    Mismatches
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                                                                                   DB 1;
. 18;
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18;
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                                                                  Gaps
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                                US-08-306-473A-40

Sequence 40, Application US/08306473A

Patent No. 5652332

; GENERAL INFORMATION:
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Patent No. 5
                                                                                                                                                                                                                                         Query Match
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INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 08/2
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/1
FILING DATE: 114-JAN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/2:
FILING DATE: 11-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Rin-Laures, Li-Hsien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 11-JUL-
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                       FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Scannon, Patrick J.
TITLE OF INVENTION: Anti-Funga
                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
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                     APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/372,105 FILING DATE:
                                                                                                                                                                                                           Local Similarity
nes 5; Conserv
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CITY: Chicago
                                                                                                                                                                           12 GWIKQLF 18
                                                                                                                                                                                                                                                                                                  ATURE:
NAME/KEY: misc_feature
NAME/KEY: misc_feature
"XMP.38"
                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
TOPOLOGY: linear
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: United States of America
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                                                                                                                                                                                                                                                                                                                                                                                               14 amino acids
                 Little, Roger G.
                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lim, Edward
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anti-Fungal Materials and Methods
                                                                                                                                                                                                        30.3%; Score 33; DB 1; 71.4%; Pred. No. 18; tive 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lewis H.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08/209,762
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South Wacker Drive
                                                                                                                                                                                                                                       Length 14;
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                                                                                                                                                                                                                                                 Sequence 40, Application US/08209762 Patent No. 5733872 GENERAL INFORMATION:
                                                                                                                                  APPLICANT: Little, Roger
TITLE OF INVENTION: Biol
TITLE OF INVENTION: Fund
TITLE OF INVENTION: Prod
TITLE OF SEQUENCES: 98
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Bio
TITLE OF INVENTION: Fun
TITLE OF INVENTION: Per
TITLE OF INVENTION: Use
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 312-715-1234 INFORMATION FOR SEQ ID NO:
COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: McDonnell, John J.
REGISTRATION NUMBER: 26,9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 26,949
REFERENCE/DOCKET NUMBER: 93,1133-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-715-1000
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COEMIA DE CONTROLOMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: peptide
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CITY: Chicago
STATE: Illinoi
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                                                                                       CITY: Chicago
                                                                                                          STREET:
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                                                    COUNTRY:
                                                                                                                       ADDRESSEE:
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                                                                       Illinois
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Suite 3000, 10 S. Wacker Drive
                                                                                                      E: Allegretti & Witcoff, Ltd.
10 South Wacker Drive, Suite 3000
                                                                                                                                                                    Little, Roger G.

WENTION: Biologically Active Peptides from
WENTION: Functional Domains of Bactericidal/Permeability-Increasing
WENTION: Protein and Uses Thereof
                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                30.38;
71.48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Biologically Active Peptides from Functional Domains of Bactericidal/
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Pred. No.
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18;
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TELEX: 910-221-5317
INFORMATION FOR SEQ ID NO:
SEQUEC CHARACTERISTICS:
                                                                                                                    APPLICATION NUMBER: US/08/473,344
FILING DATE: 7-JUN-1995
PRIOR APPLICATION NUMBER: US 08/306,473
APPLICATION NUMBER: US 08/306,473
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US 08/209,762
FILING DATE: 11-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCDONNEIL JOHN J.
REGISTRATION NUMBER: 26,949
REFERENCE/DOKKET NUMBER: 93,1133-J
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
TITLE OF INVENTION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
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Local Similarity 71.48;
les 5; Conservation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 11-JAN-1994
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
TOPOLOGY: linear
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5 GWLAQLF 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 40, nr.
No. 5763567
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                                                                                                                                                                                                                                                                                                                                           60606
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/08473344
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10 South Wacker Drive, Suite 3000
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Ittle, Roger G
IVENTION: Biologically Active Peptides from
IVENTION: Functional Domains of Bactericidal/Permeability-Increasing
IVENTION: Protein and Uses Thereof
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Mismatches
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TELEFAX:

312-715-1234

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US-08-621-803-39
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Best Local Similarity 71.
Matches 5; Conservative
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                   NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 2712
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
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                                                                                        FEATURE:
                                                                                                                                           FEATURE:
                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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STATE: Illinois
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OTHER INFORMATION: "BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
                OTHER INFORMATION: /label= Amidation
OTHER INFORMATION: /note= "The C-Terminus is Amidated."
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/621,803 FILING DATE: 22-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                  NAME/KEY:
LOCATION:
                                                                                                       NAME/KEY: misc_feature
OTHER INFORMATION: "XMP.38"
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5 GWLAQLF 11
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                                                                                                                      NAME/KEY:
                                                                                                                                                                                                               LENGTH:
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                                                  C-Terminus
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71.4%;
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Fusion Proteins and BPI-Derived Peptides
265
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                                                                                                                                                                                                                                                    39:
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Pred. No. 18;
1; Mismatches
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Query Match

30.3%;

Score 33;

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Length 14;

; Sequence 13, Application US/08621259A
; Patent No. 5858974

GENERAL INFORMATION:

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US-08-485-445A-40
RESULT 9
US-08-621-259A-13
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                                                                                                       Query Match
Best Local Similarity
Whiches 5; Conserve
                                                                                                                                                                                               US-08-485-445A-40
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 11-MAR-1994
PRIOR APPLICATION NUMBER: 08/18:
APPLICATION NUMBER: 08/18:
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: MCNICholas, Janet M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 312-707-8889
                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                    MOLECULE TYPE:
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                                                                                      12 GWIKQLF 18
                                                                                                                                                                                                          NAME/KEY: misc_feature OTHER INFORMATION: "BPI.38"
                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                     TYPE:
                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                      NAME: McNicholas, Janet M. REGISTRATION NUMBER: 32,91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
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                                                            GWLAQLF
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                                                                                                                                                                                                                                                                                  amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: McAndrews, Held & Malloy,
Suite 3400, 500 West Madison
                                                                                                                                                                                                                                                                                                 14 amino acids
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                                                                                                                       Conservative
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                                                                                                                                                                                                                                                       peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Uses Thereof
                                                                                                                                     30.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biologically Active Peptides from Functional Domains of Bactericidal/Permeability-Increasing Protein and
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                                                                                                                       1; Mismatches
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                                                                                                                                     Score 33; DB 2;
Pred. No. 18;
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Street
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Query Match
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US-09-119-263-40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: /label= Amidation ; OTHER INFORMATION: /note= "The C-Terminus is Amidated." US-08-621-259A-13
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                                                                                                                                                                                                                                    Sequence 40, Application US/09119263 Patent No. 6054431
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COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN PC-DOS/MS-DOS
SOFTWARE: PATENTIN PATA:
APPLICATION NUMBER: US/08/621,259A
FILING DATE: 21-MAR-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/504,841
FILING DATE: 20-JUL-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCNICHOLAS, Janet M.
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 11021US02
                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                          APPLICANT: Horwitz, Arnold H.
APPLICANT: Lambert, Lewis H.
APPLICANT: Little, Roger G.
TITLE OF INVENTION: Antl-Gram-Positive Bacterial Methods
TITLE OF INVENTION: Materials
ADDAGET: 000
STREET: 000
CITY: Chicago
Inc: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Fadem, MITCHELL B.
TITLE OF INVENTION: Anti-Fungal Peptides
NUMBER OF SEQUENCES: 252
                                                                                       NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 312/707-8889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                          12 GWIKQLF 18
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OTHER INFORMATION: "XMI
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                                                    E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E: McAndrews, Held & Malloy, Ltd 500 West Madison Street
                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        United States of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C-Terminus
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71.4%;
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Pred. No. 18;
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RESULT 11
PCT-US94-02465-40
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; OTHER INFORMATION: "XM
US-09-119-263-40
                                                                                                                                                                                                                                                                                                                                   Sequence 40, Application PC/TUS9402465 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 5; Conserv
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TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                     TITLE OF INVENTION: ITITLE OF INVENTION: ITITLE OF INVENTION: INVENTION: INVENTION: ITITLE OF SEQUENCES:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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ZIP: 60606-6402
ZOMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPORTIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
CURRENT APPLICATION DATA:
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LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                       STREET: 10 South
CITY: Chicago
STATE: Illinois
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12 GWIKQLF 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 GWLAQLF 11
                                                                                                           60606
                                                                                                                                                                           E: Allegretti & Witcoff, Ltd.
10 South Wacker Drive, Suite 3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide
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71.4%;
                                                                                                                                                                                                                                                         Protein and Uses Thereof
                                                                                                                                                                                                                                                                     Biologically Active Peptides from Functional Domains of Bactericidal/Permeability-Increasing
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Pred. No. 18;
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: PC

11-JAN-1994

PCT/US94/02465

ATTORNEY/AGENT INFORMATION:

CLASSIFICATION: FILING DATE:

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Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 312-715-1000 TELEFAX: 312-715-1234
                              NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 27129/32415
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                      APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/183,222
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                  FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA: APPLICATION NUMBER: PC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Noonan, Kevin E
REGISTRATION NUMBER: 35,303
REFERENCE/DOCKET NUMBER: 93
                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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OTHER INFORMATION: "BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        United States of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "BPI.38"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          America
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NAME/KEY: misc_feature;
OTHER INFORMATION: "XM
PCT-US95-00498-40
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
; NAME/KEY: misc_feature; OTHER INFORMATION: "XMP.38" PCT-US95-00656-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 40, Application PC/TUS9500656 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                          APPLICATE: 11-JUL 222

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/209

APPLICATION NUMBER: 11-MAR-1994
                                                                                                                                                    TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: 1BM PC compatible
OPERATING SYSTEM: PC-DDS/MS-DOS
SOTTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 2 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Anti-Fungal Materials and Methods NUMBER OF SEQUENCES: 227
                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/1:
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: PRIOR APPLICATION DATA:
                                                 MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                     REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 37
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                    SEQUENCE CHARACTERISTICS:
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CITY: Chicago
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: PCT/US95/00656
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                                                                                    TOPOLOGY:
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                                                                                                                 LENGTH:
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                                                                                                                    14 amino acids
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Pred. No.
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Query Match
Best Local Similarity
Matches 5; Conserv

Conservative

 Mismatches Score 33; DB Pred. No. 18;

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30.3%; 71.4%;

DB 4;

Length 14;

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PCT-US95-09262-13
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                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
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FILING APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/183,222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 08/306,473
FILING DATE: 15-SEP-94
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/372,103
FILING DATE: 13-JAN-95
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/306,473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
FILING DATE:
PRIOR APPLICATION DATA:
08/372,105
                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/030,644
FILING DATE: 12-MAR-93
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICATION NUMBER: 08/209,762
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                                                                                                                                                 MOLECULE TYPE: peptide
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NAME/KEY: Modified-site LOCATION: C-Terminus OTHER INFORMATION: /labe OTHER INFORMATION: /note
                                                                                                                                                                                                                                                                    TELEPHONE: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                     NAME: Borun, Michael F. REGISTRATION NUMBER: 25,447
                                                                                           NAME/KEY: misc_feature
OTHER INFORMATION: "XMP.38"
                                                                                                                                                                                                                                                                  TELEFAX: 312/4
TELEX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/093,202 FILING DATE: 15-JUL-93
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/label= Amidation
/note= "The C-Terminus is Amidated"
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US-08-621-803-227
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                                                                                                                                        US-08-621-803-227
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                                                          Query Match
Best Local Similarity
Matches 5; Conserv
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Best Local Similarity 71.4
Matches 5; Conservative
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TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/621,803
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: BOTUN, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/3319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Better, MA
TITLE OF INVENTION: F
TITLE OF INVENTION: F
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                 MOLECULE TYPE:
                12 GWIKQLF 18
                                                                                                                                                    LOCATION: C-Terminus
OTHER INFORMATION: /label- Amidation
OTHER INFORMATION: /note- "The C-Terminus is Amidated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 6300 STATE: Illino:
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OTHER INFORMATION: "XM
                                                                                                                                                                                                                                                                                                     TOPOLOGY:
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1 GWLIQLF
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                                                             Conservative
                                                                                                                                                                                                    Modified-site
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Methods for Recombinant Microbial Production of Fusion Proteins and BPI-Derived Peptides

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                                                          Score 31; DB Pred. No. 26; 1; Mismatches
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Pred. No. 18;
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Search completed: December 21, 2000, 08:31:50 Job time: 373 sec

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Perfect score:
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       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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     protein search, using sw
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Match Length
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Maximum Match 100%
Listing first 45 summaries
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receptor al
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A;Gene: LMP7 C;Superfamily: multicatalytic endopeptidase complex chain

EMBL: U32862;

NID:g1045468; PIDN:AAA80234.1;

PID:g1045469

Conservative

2; Mismatches Score 31; Pred. No.

1; Indels

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Gaps

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DB 2; 1e+02;

Length 18

28.4%; 57.1%;

C; Genetics: A; Cross-references:

RESULT 1 G02018 proteasome chain LMP7 - hu C;Species: Homo sapiens (m C;Cate: 21-Dec-1996 #seque C;Accession: G02018 R;Kim, T. submitted to the EMBL Data A;Reference number: G09054 A;Accession: G02018 A;Status: prelininary; tran A;Molecule type: DNA A;Gross-references: FMRI-UI A;Cross-references: T-18 KIMP A;Cross-references: PRAI-UI		30 31 31 32 33 33 33 34 34 44 44 44 44 44 44 44 44
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rev _rev _rev		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RESULT 1 G02018 G02018 Gypecies: Homo sapiens (man) C;Species: Homo sapiens (man) C;Date: 21-Dec-1996 #sequence_revision 06-Jun-1997 C;Accession: G02018 R;Kim, T. Submitted to the EMBL Data Library, July 1995 A;Reference number: G09054 A;Accession: G02018 A;Colored Type: DNA A;Residues: 1-18 < KIM> A;Colored Type: DNA A;Colored Ty	ALIGNMENTS	\$71592 \$71426 \$78426 \$56978 D56979 PD00442 P00076 A28505 A28505 PH1347 PH1321 PH1321 PH1331 PH1306 PH1306 PH1306 PH1312 PH1316
RESULT 1 G02018 G02018 Graphers (man) Cracessome chain LMP7 - human (fragment) Cracessome chain LMP7 - human (fragment) Cracessome chain LMP7 - human (fragment) Cracession: G02018 RrKim, T. Submitted to the EMBL Data Library, July 1995 Arreference number: G09054 Arreference number: G09054 Arreference G02018 Arreference Submitted from GB/EMBL/DDhJ Arrestdues: Dreliminary; translated from GB/EMBL/DDhJ Arrestdues: 1-18 (KIM) Arrestdues: FMRLUT32862: NTD-G1045468. DIDN:AAA80334 1: DID.G1045468		serine proteinase Ig heavy chain DJ 52.5K protein - sp collagen alpha 1(I collagen alpha 1(I collagen alpha 1(I NIPSNAP2 protein - NADH dehydrogenase neurotensin like p Ig heavy chain DJ

RESULT 2 PH1790 PH1790 T cell receptor alpha chain V region (clone 2PBL V alpha 24-6) - human (fragment) C;Species: Homo sapiens (man) C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999 C;Accession: PH1790 R;Porcelli, S; Yockey, C.E.; Brenner, M.B.; Balk, S.P. J. Exp. Med. 178, 1-16, 1993 A;Title: Analysis of T cell antigen receptor (TCR) expression by human peripheral В ρ A;Reference number: PH1754; MUID:93301585 A;Accession: PH1790 A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-16 <POR> Query Match Best Local Similarity Thes 4; Conserve В Q Query Match Best Local Similarity Matches 6; Conser 4 KEDGWVK 10 1 HLCGERGP 4 HLQGEREP 11 9 REPGWIK 15 Conservative 27.5%; 75.0%; Score 30; DB 2; Lo Pred. No. 1.3e+02; 0; Mismatches 2; Length 16; 0 human peripheral blo Gaps

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C;Accession: $39030
R;Conlon, J.M.; Olson, K.R.
FEBS Lett. 334, 75-78, 1993
A;Title: Purification of a vasoactive peptide related
A;Reference number: $39030; MUID:94039817
A;Accession: $39030
A;Status: greliminary
A;Molecule type: protein
A;Residues: 1-10 <CON>
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R;Porcelli, S.; Yockey, C.E.; Brenner, M.B.; Balk, S.P.
J. Exp. Med. 178, 1-16, 1993
A;Title: Analysis of T cell antigen receptor (TCR) expression
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C;Species: Oncorhynchus mykiss (rainbow trout)
C;Date: 19-May-1994 #sequence_revision 19-Apr-1996 #text_change 19-Apr-1996
                                                                                                                                                     A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-17 <POR>
                                                                                                                                                                                                                                                                                                                                                                                                                              T cell receptor alpha chain V region (clone 3PBL V alpha 24-8) - human (fragment) C;Species: Homo sapiens (man) C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999 C;Accession: PH1802
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A; Residues: 1-15 < POR>
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A; Accession: PH1788
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J. Exp. Med. 178, 1-16, 1993
A;Title: Analysis of T cell antigen receptor (TCR) expression by human peripheral blood
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A; Accession: PH1802
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Pred. No. 1.2e+02;
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Pred. No. 8.8e+02;
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T cell receptor alpha chain V region (clone 5PBL V alpha 24-5) - C; Species: Homo sapiens (man) C; Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 1 C; Accession: PH1822 R; Porcelli, S.; Yockey, C.E.; Brenner, M.B.; Balk, S.P. J. Exp. Med. 178, 1-16, 1993 A; Title: Analysis of T cell antigen receptor (TCR) expression by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      urease (EC 3.5.1.5) small chain UreA - Helicobacter mustelae
C;Species: Helicobacter mustelae
C;Date: 19-Dec-1993 #sequence_revision 25-Apr-1997 #text_char
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A;Molecule type: mRNA
A;Residues: 1-17 <POR:
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A; Accession: PH1822
                                        Biochem. Biophys. Res. Commun. 167, 273-279, 1990
A;Title: A molluscan neuropeptide related to the crustacean hormone, RPCH
A;Reference number: A34626; MUID:90179762
A;Accession: A34626
                                                                                                                                            RPCH-related neuropeptide - ferruginous spindle
C;Species: Fusinus ferrugineus (ferruginous spindle)
C;Date: 06-Jul-1990 #sequence_revision 06-Jul-1990 #text_change 31-Dec-1993
C;Accession: A34626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Superfamily: urease 26K chain;
C;Keywords: hydrolase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Note: sequence extracted from NCBI backbone (NCBIP:119487) C; Superfamily: urease 26K chain; urease 11K chain homology;
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R; Turbett, G.R.; Ho
                      A; Status: preliminary
                                                                                                        R;Kuroki, Y.; Kanda, T.; Kubota, I.; Fujisawa, Y.; Ikeda, Biochem. Biophys. Res. Commun. 167, 273-279, 1990
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Pred. No. 9.4e+02;
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1-4 <KUR>

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A:Molecule type: protein
A:Residues: 1-8 <JAF>
A:Residues: 1-8 <JAF>
C:Superfamily: adipokinetic hormone
C:Superfamily: adipokinetic hormone
C:Keywords: amidated carboxyl end; corpora cardiaca; hormone; neuropeptide;
F:1/Modified site: pyrrolidone carboxylic acid (Gln) #status predicted
F:8/Modified site: amidated carboxyl end (Trp) #status predicted
                                                                                                                                                                   C;Date: 23-Mar-1990 #sequence_revision 23-Mar-1990 #text_change 31-Oct-1997 C;Accession: A33995 R;Jaffe, H.; Raina, A.K.; Riley, C.T.; Fraser, B.A.; Nachman, R.J.; Vogel, V.W.; Rroc. Natl. Acad. Sci. U.S.A. 86, 8161-8164, 1989 A;Title: Primary structure of two neuropeptide hormones with adipokinetic and hyp A;Reference number: A33995; MUID:90046758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C:Comment: This neuropeptide, isolated from the eyestalks of the zed pigment-containing cells.

C:Suberfamily: 44-54-54
                                                                                                                                                                                                                                                                                       adipokinetic hormone - black horse fly
C; Species: Tabanus atratus (black horse fly)
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C;Keywords: amidated carboxyl end; blocked amino
F;I/Modified site: pyrrolidone carboxylic acid (G
F;8/Modified site: amidated carboxyl end (Trp) #s
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A;Title: Structure of the red-pigment-concentrating
A;Reference number: S07139; MUID:75054965
A;Accession: S07139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N;Alternate names: blanching hormone C;Species: Pandalus borealls (northern C;Date: 02-Aug-1994 #sequence_revision C;Accession: A61348; S07139
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C;Keywords:
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A43405
6-phosphofructo-2-kinase (EC 2.7.1.105) / fructose-2,6-bisphosphate C:Species: Bos primigenius taurus (cattle) (c) Species: Bos primigenius taurus (cattle) (c) Species: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 31-MC:Accession: A43405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R:Janssens, M.P.E.; Kellner, R.; Gaede, G. Blochem. J. 302, 539-543, 1994
A:Title: A novel adipokinetic octapeptide A:Reference number: $55310; MUID:94379987
A:Accession: A58620
R:Ventura, F.; Rosa, J.L.; Ambrosio, S.; Pilkis, S.J.; Bartrons, R. J. Biol. Chem. 267, 17939-17943, 1992
A;Title: Bovine brain 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase.
                                                                                                                                                                                                                                                                                                                                                                                           C;Superfamily: adipokinetic hormone
C;Keywords: amidated carboxyl end; hormone; neuropeptide; pyroglutamic ac
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;8/Modified site: amidated carboxyl end (Trp) #status experimental
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C;Species: Ischnura senegalensis
C;Date: 28-Oct-1997 #sequence_revision 31-Oct-1997 #text_change 07-May-1999
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Biochem. J. 302, 539-543, 1994
A;Title: A novel adipokinetic octapeptide
A;Reference number: $55310; MUID:94379987
A;Accession: $55310
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3; Conservative 0;
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A;Residues: 1-10 variable.

R;Gaede, G.; Rinehart, K.L.

R;Gaede, G.; Rinehart, K.L.

A;Title: Primary structures of hypertrehalosaemic neuropeptides isolated from the corpor entalis and of the stick insect Extatosoma tiaratum assigned by tandem fast atom bombard A;Reference number: S08995; MUID:90253659

A;Accession: S09137

A;Molecule type: protein
A;Residues: 1-10 <GAE>
C;Superfamily: adipokinetic hormone
C;Superfamily: adipokinetic hormone
C;Keywords: amidated carboxyl end; hormone; neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;10/Modified site: amidated carboxyl end (Thr) #status experimental
A.Title: Primary structures of hypertrehalosaemic neuropeptides isolated from the corpor entalis and of the stick insect Extatosoma tiaratum assigned by tandem fast atom bombard A; Reference number: S08995; MUID:90253659
A; Accession: S08997
A; Molecule type: protein
A; Residues: 1-10 <GAE>
C: Superfamily: adipokinetic hormone
C: Keywords: amidated carboxyl end; hormone; neuropeptide; pyroglutamic acid
F:1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;10/Modified site: amidated carboxyl end (Thr) #status experimental
                                                                                                                                                                                                                                                                      hypertrehalosemic neuropeptide Bld-HrTH - cockroach (Gromphadorina portentosa) C;Species: Gromphadorina portentosa C;Date: 30-Jun-1992 **sequence_revision 14-Sep-1994 **text_change 24-Oct-1997 C;Accession: S08997 R;Gaede, G.; Rinehart, K.L. Biol. Chem. Hoppe-Seyler 371, 345-354, 1990 Biol. Chem. Hoppe-Seyler 371, 345-354, 1990
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A;Accession: A43405
A;Molecule type: protein
A;Residues: 1-10 <VEN>
C;Superfamily: 6-phosphofructo-2-kinase / fructose-2,6-bisphosphate 2-phosphatase;
C;Keywords: phosphoric monoester hydrolase; phosphotransferase
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Meuropeptides 15, 107-109, 1990

A;Title: Structure of the hypertrehalosemic neuropeptide of the German cockroach, Blatte
A;Reference number: A60421; MUID:91179584

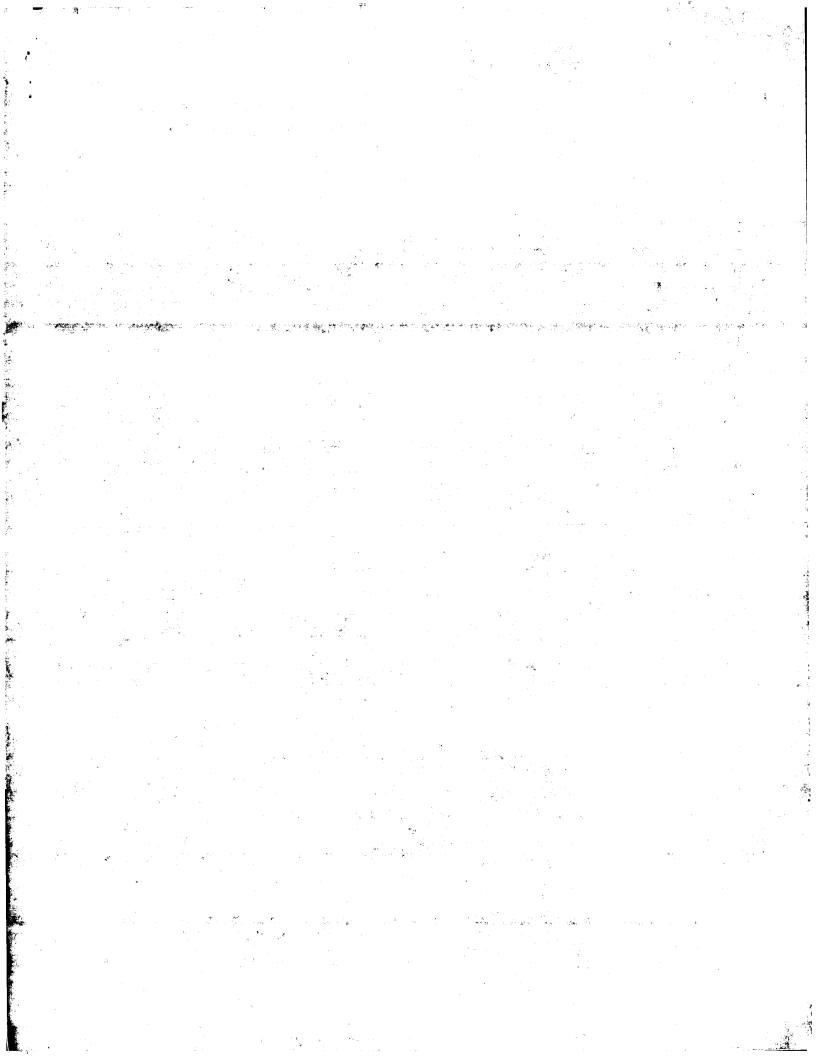
A;Accession: A60421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nypertrehalosemic hormone - German cockroach
N;Alternate names: Bld-HrTH
C;Species: Blattella germanica (German cockroach)
C;Date: 03-Feb-1993 #sequence_revision 03-Feb-1993 #text_change 31-Oct-1997
C;Accession: A60421; S09137
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Search completed: December 21, 2000, 08:30:08
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    ВB
TRP3_LEUMA
AKH_TABAT
RPCH_PANDO
HTF_NAUCI
HTF_TABAT
AROQ_AMYME
LPK1_LOCMI
BRK_PARID
NEUT_CHICK
Q2OG_COMTE
CCH3_BOMMO
CCTC_SPIOL
PORD_METTM
HPA1_TREBR
CAT1_FASHE
CAT1_FASHE
CAT1_FASHE
COM1_PETMA
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CAT1_FASHE
COM1_SQUAC
RS19_ELYEBP
GONL_SQUAC
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P14595 tabanus atr
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P10939 nauphoeta c
P14596 tabanus atr
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P12797 megascolia	-	P18110 romalea mic	P56264 litoria xan	P38644 mus musculu	P25419 tenebrio mo	P04549 periplaneta		P30369 macropus eu	P25418 libellula a	P34153 chionoecete	P56585 pseudomonas	

ALIGNMENTS

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TABAT AKH_TABAT STANDARD; PRT; 8 AA. P14595; 01-JAN-1990 (Rel. 13, Created) 01-FEB-1994 (Rel. 28, Last sequence update) 01-FEB-1994 (Rel. 28, Last annotation update) ADJPOKINETIC HORMONE (AKH) (DIPTERAN CORPORA CARDIACA FACTOR I) (DCC I). Tabanus atratus (Horse fly). Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Tabanomorpha; 11 SEQUENCE. TISSUE=CORPORA CARDIACA; MEDLINE; 90046758.	Query Match 25.7%; Score 28; DB 1; Length 19; Best Local Similarity 83.3%; Pred. No. 1.5e+02; Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps , 7 GEREPG 12 2 GERAPG 7	

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RESULT 3

RPCH_PANGO
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AC P08939
DT 01-PEB
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DT 01-PEB
OC Eukary
OC Eumnala
OC Pandal
OC Pandal
OC Pandal
CC ST
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SEQUENCE 8 A
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P08939;
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01-FEB-1994 (Rel. 28, Last sequence up
01-OCT-2000 (Rel. 40, Last annotation
RED PIGMENT CONCENTRATING HORMONE (RPC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jaffe H., Raina A.K., Riley C.T., Fraser B.A., Nachman R.J., Vogel V.W., Zhang Y.-S., Hayes D.K.; "Primary structure of two neuropeptide hormones with adipokinetic and hypotrehalosemic activity isolated from the corpora cardiaca of horse flies (Diptera).";
HTF_NAUCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pandalus borealis (Northern red shrimp).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
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es (Diptera).";
c. Natl. Acad. Sci. U.S.A. 86:8161-8164(1989).
FUNCTION: THIS HORMONE, RELEASED FROM CELLS IN THE CORPORA CARDIACA AFTER THE BEGINNING OF FLIGHT, CAUSES RELEASE OF CARDIACA AFTER THE FAT BODY AND THEN STIMULATES THE FLIGHT DIGLYCERIDES FROM THE FAT BODY AND THEN STIMULATES THE FLIGHT DIGLYCERIDES AS AN ENERGY SOURCE.
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                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chim. Biophys. Acta 371:304-311(1974).
FUNCTION: THIS HORMONE ADAPTS THE ANIMAL
STIMULATING CONCENTRATION OF THE PIGMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHROMATOPHORES
                                                                                                                                                                PGW 13
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PIR; A26381, A26381.
PIR; S08997; S08997.
PIR; S08998; S08998.
PIR; S09137; S09137.
PIR; A60421; A60421.
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SPECIES—E. MADERAE, G.PORTENTOSA, AND B.GERMANICA;
SPECIES—E. MADERAE, G.PORTENTOSA, AND B.GERMANICA;
MEDLINE; 90253659.

MEDLINE; 90253
                                  HTF_TABAT
P14596;
O1-JAN-1990
O1-FEB-1994
O1-FEB-1994
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01-JUL-1989
01-FEB-1994
01-NOV-1997
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[3]
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Gaede G., Rinehart K.L. Jr.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gromphadorina portentosa (Cockroach).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta
Pterygota; Neoptera; Orthopteroidea; Dictyoptera; Blattaria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUL-1989 (Rel. 11, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
HYPERTREHALOSAEMIC HORMONE (HTH) (HYPERTREHALOSAEMIC NEUROPEPTIDE).
Nauphoeta cinerea (Cinereous cockroach) (Gray cockroach),
Leucophaea maderae (Madeira cockroach),
Blattella germanica (German cockroach), and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Veenstra J.A., Camps F.;
"Structure of the hypertrehalosemic neuropeptide of the German cockroach, Blattella germanica.";
Neuropeptides 15:107-109(1990).
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MOD_RES 1 1 1

MOD_RES 10 10

SEQUENCE 10 AA; 1092 1
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      HYPERTREHALOSAEMIC FACTOR
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SIMILARITY: BELONGS TO THE AKH / HRTH / RPCH FAMILY.
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AKH; 1.
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Last sequence update)
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CTOR (HOTH) (DIPTERAN CORPORA CARDIACA FACTOR II)
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01-NOV-1995 (Rel. 3
30-MAY-2000 (Rel. 3
3-DEHYDROQUINATE DE
                                                                                                           "Purification and characterization of a dual function
3 dehydroquinate dehydratase from Amycolatopsis methanolica.";
J. Gen. Microbiol. 138:4449-2457 (1992).
-i. FUNCTION: CATALYZE A TRANS-DEHYDRATION VIA AN ENOLATE
INTERNEDIATE. IS INVOLVED IN BOTH THE CATABOLISM OF QUINATE AND
THE BIOSYNTHESIS OF AROMATIC AMINO ACIDS. HAS A TEMPERATURE
OPTIMAL OF 76 DEGREES CELSIUS AND PH OPTIMAL OF 9.0. TYPE II
ENZYMES ARE THERMOSTABLE.
-i. CATALYTIC ACTIVITY: 3-DEHYDROQUINATE = 3-DEHYDROSHIKIMATE | + H(2)0.
-i. PATHWAY: THIRD STEP IN THE BIOSYNTHESIS OF CHORISMAFE WITHIN
THE BIOSYNTHESIS OF AROMATIC AMINO ACIDS (THE SHIKIMATE PATHWAY).
                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-NCIB 11946;
MEDLINE; 93123995.
Euverink G.J.W., Hessels G.I.,
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SEQUENCE
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Bacteria; Firmicutes; Acti
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Proc. Natl. Acad. Sci. U.S.A. 86:8161-8164(1989).

-I. FUNCTION: HYPERTREHALOSAEMIC FACTORS ARE NEUROPEPTIDES THAT ELEVATE THE LEVEL OF TREHALOSE IN THE HEMOLYMPH (TREHALOSE IN THE MAJOR CARBOHYDRATE IN THE HEMOLYMPH OF INSECTS).

-I. SIMILARITY: BELONGS TO THE AKH / HRTH / RPCH FAMILY.
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Jaffe H., Raina A.K., Riley C.T., Fr
Vogel V.W., Zhang Y.-S., Hayes D.K.;
                                                     INTERPRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Amycolatopsis.
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                                                                         SUBUNIT: HOMODODECAMER. SIMILARITY: BELONGS TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY: BELONGS; B33995; B33995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               h 22.0%;
Similarity 100.0%
3; Conservative
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                              PS01029;
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PS00256; AKH; 1.
                                                  IPR001874; -.
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Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Neoptera; Endopterygota; Diptera; Brachycera; Tabanomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10
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0 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 32, Created)
. 32, Last sequence update)
. 39, Last annotation update)
DEHYDRATASE (EC 4.2.1.10) (3-DEHYDROQUINASE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pseudonocardineae;
                         DEHYDROQUINASE_II;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10
1169
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donocardineae; Pseudonocardiaceae;
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     amino
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                                                                       TYPE-II 3-DEHYDROQUINASE
                                                                                                                                                                                                                                                                                                                                                                                                                Vrijbloed J.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fraser B.A.,
     acid
                         PARTIAL.
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biosynthesis;
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Best Local S
Matches 4
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Best Local S
Matches 4
                                                                                                                                                         _PARID
                                                                                                           BRK_PARID
P42717;
01-NOV-1995
01-NOV-1995
01-NOV-1995
                                                                       Eukaryota;
Pterygota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON_TER
SEQUENCE
Toki T., Yasuhara T., Nakajima T., "Isolation and sequential analysis Parapolybia indica."; Eisei Dobutsu 39:105-111(1988).
                                                                                                                                                                                                                                                                                                                                                       Schoofs L., Holman G.M., Hayes T.K., Nachman "Isolation, primary structure, and synthesis myotropic peptide of Locusta migratoria."; Gen. Comp. Endocrinol. 81:97-104(1991).

-i- FUNCTION: MEDIATES VISCERAL MUSCLE CONTRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LPK1_LOCMI
P20404;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Locusta migratoria (Migratory locust)
Eukaryota; Metazoa; Arthropoda; Trach
Pterygota; Neoptera; Orthopteroidea;
Acridomorpha; Acridoidea; Acrididae;
                                      TISSUE=VENOM;
                                                                                          WASPKININ.
Parapolybia
                                                                                                                                                                                                                                                                          Neuropeptide; Amidation; Pyrokinin

MOD_RES 1 1 PYRROI

MOD_RES 16 16 AMIDAN

SEQUENCE 16 AA; 1827 MW; A7178
                                                                                                                                                                                                                                                                                                              PROSITE;
                                                                                                                                                                                                                                                                                                                             (MYOTROPIC ACTIVITY).
-!- SIMILARITY: BELONGS TO THE PYROKININ FAMILY PER, A49761; A49761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-FEB-1991 (Rel. 17, Created)
01-FEB-1994 (Rel. 28, Last seq
01-NOV-1995 (Rel. 32, Last ann
LOCUSTAPYROKININ 1 (LOM-PK-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCMI
                                              SEQUENCE
                                                                Vespoidea;
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4; Conser
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                                                              Metazoa; /
Neoptera;
Vespidae;
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5 (Rel. 32,
5 (Rel. 32,
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2197
                                                              Arthropoda; Trac; Endopterygota; Polistinae; Pa
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57.1%;
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Pred. No. 7e+C
1; Mismatches
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A7178BBDCA0AFDD6
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                                                                                Tracheata; Hexapoda;
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                                                              Parapolybia
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                                                                         Hymenoptera;
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Locusta.
                   peptides
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8e+02;
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7e+02;
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of lo
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                   the
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P13724;
01-JAN-1990
01-JAN-1990
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHICK
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MOD_RES
SEQUENCE 1
                                                                                                                                                              01-NOV-1995
01-NOV-1995
01-FEB-1996
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Schach S., Tshisuaka B., Fetzner S., Lingens F.;

"Quinoline 2-oxidoreductase and 2-oxo-1,2-dihydroquinoline
dioxygenase from Comannonas testosteroni 63. The first two e
quinoline and 3-methylquinoline degradation.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gallus gallus (Chicken)
Eukaryota: Metazoa; Chor
Archosauria; Aves; Neogr
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01-JAN-1990 (Rel. 13, Last seq
01-NOV-1995 (Rel. 32, Last ann
NEUROTENSIN (NT)
                                                                                                                                                 01-NOV-1995 (Rel. 32, Last sequence update)
01-FEB-1996 (Rel. 33, Last annotation update)
QUINOLINE 2-OXIDOREDUCTASE, GAMMA CHAIN (EC 1....) (FRAGMENT).
                                                                                                                                                                                                                 COMTE
                                                                                                    STRAIN=63;
                                                                                                              SEQUENCE
                                                                                                                                  Bacteria;
                                                                                                                                            Comamonas
                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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  1,2-DIHYDROQUINOLINE.
COFACTOR: FAD AND MOLYBDENUM
PATHWAY: FIRST STEP IN THE D
                               . J. Biochem. 232:536-544(1995). FUNCTION: CONVERTS (3-METHYL-)-QUINOLINE
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                                                                                                                                testosteroni (Pseudomonas testosteroni). Proteobacteria; beta subdivision; Comamonadaceae;
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                                                                                                                                                              (Rel. 32, Created)
(Rel. 32, Last sequence (Rel. 33, Last annotation)
                                                                                                                                                                                                                                                                                              Conservative
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; Galliformes; Phasianidae; Phasianinae;
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  QUINOLINE AND
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AC P81755
DT 30-MAY
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RA F10F2
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CHH3_BOMMO
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Best Local Similarity
Matches 3; Conser
                                                                                                                                                                                                                                                                                                                        Matches
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Best Local
                   01-FEB-1991 (Re 01-FEB-1991 (Re 01-FEB-1991 (Re CHORION CLASS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID DISULFID MOD_RES MOD_RES MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (3-METHYL-)QUINOLINE.
SUBUNIT: HETEROHEXAMER OF TWO ALPHA CHAINS,
TWO GAMMA CHAINS (PROBABLE).
Oxidoreductase; Flavoprotein; FAD; Molybdenum.
NON_TER

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                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOD_RES
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modifications reduces presynaptic Ca2+ influx."; proc. Natl. Acad. Sci. U.S.A. 96:5758-5763(1999).
-i- FUNCTION: CONOTOXIN WHICH ACTS AT PRESYNAPTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P81755;
30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence up
01-OCT-2000 (Rel. 40, Last annotation
EPSILON-CONOTOXIN TXIX.
Conus textile (Cloth-of-gold cone).
Eukaryota; Metazoa; Mollusca; Gastropo
                                                                                                        CHH3_BOMMO P20729;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rigby A.C., Lucas-Meunier E., Kalume D.E., Czerwiec E., Hambe Dahlqvist I., Fossier P., Baus G., Roepstorff P., Baleja J.D., Furie B.C., Furie B., Stenflo J.P.,
"A conotoxin from Conus textile with unusual posttranslational
                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Presynaptic neurotoxin; Calcium channel inhibitor; Venom; Vitamin Camma-carboxyglutamic acid; Glycoprotein; Hydroxylation; Brominati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Neogastropoda;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=VENOM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3D-structure.
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                   (Rel. 17, Created)
(Rel. 17, Last sequence update)
(Rel. 17, Last annotation update)
SS HIGH-CYSTEINE HCA PROTEIN 13 PR
                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                        Score 21; DB
Pred. No. 1.3e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glycoprotein; Hydroxylation; Bromination;
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                 O-LINKED (GALNAC. 386C9E1C74AFA378
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1e+03;
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1.3e+03;
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                      PRECURSOR
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RESULT 13
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Best Local S
Matches
         PROSITE: PS00803; CALRETICULIN_1; PARTIAL.
PROSITE; PS00804; CALRETICULIN_2; PARTIAL.
PROSITE: PS00805; CALRETICULIN_REPEAT; PARTIAL.
Endoplasmic reticulum; Calcium-binding; Glycoprotein.
NON_TER 20 20
                                                                                                                                                                                                                                             P30806;
01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence up
01-JUL-1993 (Rel. 26, Last annotation
CALRETICULIN-LIKE PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eggshell;
SIGNAL
                                                                                                                                                                                                              Spinacia oleracea (Spinach).
Eukaryota; Viridiplantae; Embr.
Magnoliophyta; eudicotyledons;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota;
Pterygota;
                                                                                                                 Menegazzi P., Guzzo F., Baldan B., Mariani P., Treves "Purification of calreticulin-like protein(s) from spi Biochem. Biophys. Res. Commun. 190:1130-1135(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               use by non-profit institutions as long modified and this statement is not removed entitles requires a license agreement (see or send an email to license@isb-sib.ch).
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PIR; PC1240; PC1240.
                                                                                                                                                                                                     Magnoliophyta; (Caryophyllales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  *Diversity in a chorion multigene
 SEQUENCE
                                                              INTERPRO; IPRO01580;
                                                                                               -!- SIMILARITY: BELONGS TO
                                                                                                                                                            MEDLINE; 93176159
                                                                                                                                                                         TISSUE-LEAF
                                                                                                                                                                                  SEQUENCE
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                                                                                                         PTM: GLYCOSYLATED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 AA;
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AA;
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2645
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71.4%;
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                                                                                               THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Multigene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eickbush T.H.;
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                                                                                              CALRETICULIN
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Spinacia.
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Matches 3
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PORD_METTM STAN
PRO903;
01-NOV-1997 (Rel. 3
01-NOV-1997 (Rel. 3
30-MAY-2000 (Rel. 3
PYRUVATE SYNTHASE S
                                                                                                                                                                                                                                                                             __RANES
HPA1__RANES
P32415;
01-OCT-1993
   extracts
Biochim.
                                                                                                                                                              Simmaco M., de Biase D.,
Barra D., Bossa F.;
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Archaea; Euryarchaeota;
Methanobacterium.
                                    *Purification and characterization
                                                                                            MEDLINE;
                                                                                                            TISSUE-SKIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oxidoreductase;
NON_TER 12
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FUNCTION: THE PH OPTIMUM IS PH 10.0 AND THE OPTIMAL IS 80 DEGREES CELSIUS.

CATALYTIC ACTIVITY: PYRUVATE + COA + OXIDIZED FERRED ACETYL-COA + CO(2) + REDUCED FERREDOXIN.

COFACTOR: BINDS TWO 4FE-4S CLUSTERS (BY SIMILARITY).

SUBUNIT: HETEROTETRAMER OF ONE ALPHA, ONE BETA, ONE
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(Rel. 35, Last sequence update)
(Rel. 39, Last annotation update)
THASE SUBUNIT PORD (EC 1.2.7.1) (PYRUVATE
(POR) (PYRUVIC-FERREDOXIN OXIDOREDUCTASE
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                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: sp_archea:*
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3: sp_fungi:*
4: sp_inverteb
6: sp_mammal:*
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Ol8502 schistosoma
Qur4w5 helicobacte
O77893 oreochlorocis
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Q9uc71 homo sapien
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MEDLINE; 94039817.
COnlon J.M., Olson K.R.;
"Purification of a vasoactive petrout plasma.";
FEBS Lett. 334:75-78(1993).
The second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o
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Q9PRZ1;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
Q1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
QYSYL-BRADYKININ-VASOACTIVE PEPTIDE KALLIDIN HOMOLOG.
QNCOCHYNCHUS MYKISS (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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ALIGNMENTS

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Q9UC71;
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01-MAY-2000 (TrEMBLrel. 13, C.
01-MAY-2000 (TrEMBLrel. 13, L.
01-JUN-2000 (TrEMBLrel. 14, L.
FILAGGRIN (FRAGMENT).
 Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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33C59075A3786777 CRC64;

peptide related to lysyl-bradykinin from

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SEQUENCE.
SEQUENCE.
MEDLINE: 95337087.
A Thulin C.D., Walsh K.A.;
A Thulin C.D., Walsh K.A.;
T "Identification of the amino termino"
T differential LC/MS techniques: impl'
processing."
RT processing."
RL Biochemistry 34:8687-8692(1995).
SPOUENCE 20 AA; 2199 MW; OFD08
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01-MAY-2000
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BRADYKININ.
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                     EMBL; AF
   SEQUENCE
                                     STRAIN-EGYPTIAN;
Hamdan F.F., Ribeiro P.;
Submitted (JUN-1997) to the
EMBL; AF006679; AAC62255.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE: 95380361.
Conlon J.M., Platzack B., Marra L.E.,
"Isolation and biological activity of
of the phylogenetically ancient fish,
                                                                                                                                                                                                                                LYSOPHOSPHOLIPASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gar.
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SEQUENCE 9 AA; 1099 MW;
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Neopterygii; :
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Schistosomatidae;
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; Craniata; Vertebrata; Euteleostomi;
Semionotiformes; Lepisosteidae;
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Best Local :
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077893;
01-NOV-1998
01-NOV-1998
01-NOV-1998
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Q9R4W5;
Q9R4W5;
01-MAY-2000
01-JUN-2000
30 KDA MAJOR
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MEDLINE: 95020803.

Yokota K., Hirai Y., Haque M., Hayashi S., Iso Nagamachi E., Tsukada Y., Fujii N., Oguma K.; "Heat shock protein produced by Helicobacter "Heat shock protein produced by Helicobacter "rorohiol. Immunol. 38:403-405(1994).
                                                        NON_TER
NON_TER
SEQUENCE
                                                                                                   class II B loci.";
Genetics 149:1527-1547(1998).
EMBL; AF050003; AAC41342.1; -.
                                                                                                                                                                                                    Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Actinopterygii; Neopterygii; Teleostei; Euteleostei; Acanthopterygii;

Percomorpha; Perciformes; Labroidei; Cichlidae; Oreochromis.
                                                                                                                                                                                                                                                 01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
MHC CLASS II B LOCUS 10 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Microbiol. Immunol. 38:403-40
INTERPRO; IPRO02026, -...
PFAM; PF00547; urease_gamma;
SEQUENCE 20 AA; 2302 MW;
                                                                                                                                  Malaga-Trillo E., McAndrew B., Vincek Sueltmann H., Figueroa F., Klein J.; "Linkage relationships and haplotype
                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE; 98315113.
                                                                                         MHC
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Helicobacter.
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01-JUN-2000 (TrEMBLrel. 14, Last annotation
30 KDA MAJOR HEAT SHOCK PROTEIN (FRAGMENT).
Helicobacter pylori (Campylobacter pylori).
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Score 26; DB Pred. No. 7.3e 3; Mismatches
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Best Local Similarity
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Urbach E., Chisholm S.W.;

"Genetic diversity in Prochlorococcus posorted from the Sargasso Sea and Gulf St
Limnol. Oceanog. 43:1615-1630(1998).

EMBL; AFF070176; AAD20791.1; -.

NON_TER
SEQUENCE 17 AA; 1953 MW; 630843039AF
      Q9UCG3;
Q9UCG3;
01-MAY-2000
01-MAY-2000
01-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1999
01-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Braun H.P., Kruft V., Schmitz U.K.; Planta 193:99-106(1994). SEQUENCE 17 AA; 1758 MW; F95F7B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
CYTOCHROME-C REDUCTASE 55 KDA SUBUNIT (EC 1.10.2.2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Magnoliophyta; eudicotyledons; Asteridae; euasterids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Solanaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mitochondrion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Solanum tuberosum (Potato).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Prochlorococcus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYTOCHROME B (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q9X3I3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9X3I3
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nes 4; Conserv
                                                                                                                                                                                                                                                                                           1 LLLHLQG 7
|:||: |
4 LMLHIDG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ...
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      (TrEMBLrel.) (TrEMBLrel.)
                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                     PRELIMINARY;
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      13,
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Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 26; DB
Pred. No. 1.16
4; Mismatches
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Last sequence up
Last annotation
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Pred. No. 1.1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F95F7BF7940F5F21 CRC64;
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                                                                                                                                     PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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Stream.";
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RESULT Q16045
ID 016045
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Best Local
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Best Local
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  SEQUENCE: 93084378.
MEDLINE; 93084378.
Turbett G.R., Hoj F
"Purification and c
                                                                                                   Q9R5F6 PRELIMINARY; PRT; 18 AA.
Q9R5F6;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
QREASE SMALL SUBUNIT (FRAGMENT).
Helicobacter mustelae.
Bacteria; Proteobacteria; epsilon subdivision; Heli
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NON_TER
SEQUENCE
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia: Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 93249387.
Bangert K., Johnsen A.
"Different N-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nagai Y., Ueno S., Saeki Y., Soga F., Ya "Expression of the D3 dopamine receptor transcript generated by alternative spli lymphocytes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biochem. Biophys. EMBL; S63845; CAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. MEDLINE; 93326145.
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Biochem
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                                                                                                                                                                                                                                                                                                                                                                                               2 LLHLQ 6
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5; Conserv
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7; Conserv
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K., Johnsen A.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 291:623-625(1993).
19 AA; 2065 MW; 41352BF04D1EEAE9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hys. Res. Co
CAB32270.1;
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  P.B., Horne R., I characterization
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MW.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 25;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 25.5; DB 4;
Pred. No. 1.5e+03;
1; Mismatches 2;
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No. 1
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ptor gene and
splicing in h
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  B.J.
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                                                                                                                        Helicobacter group;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 14;
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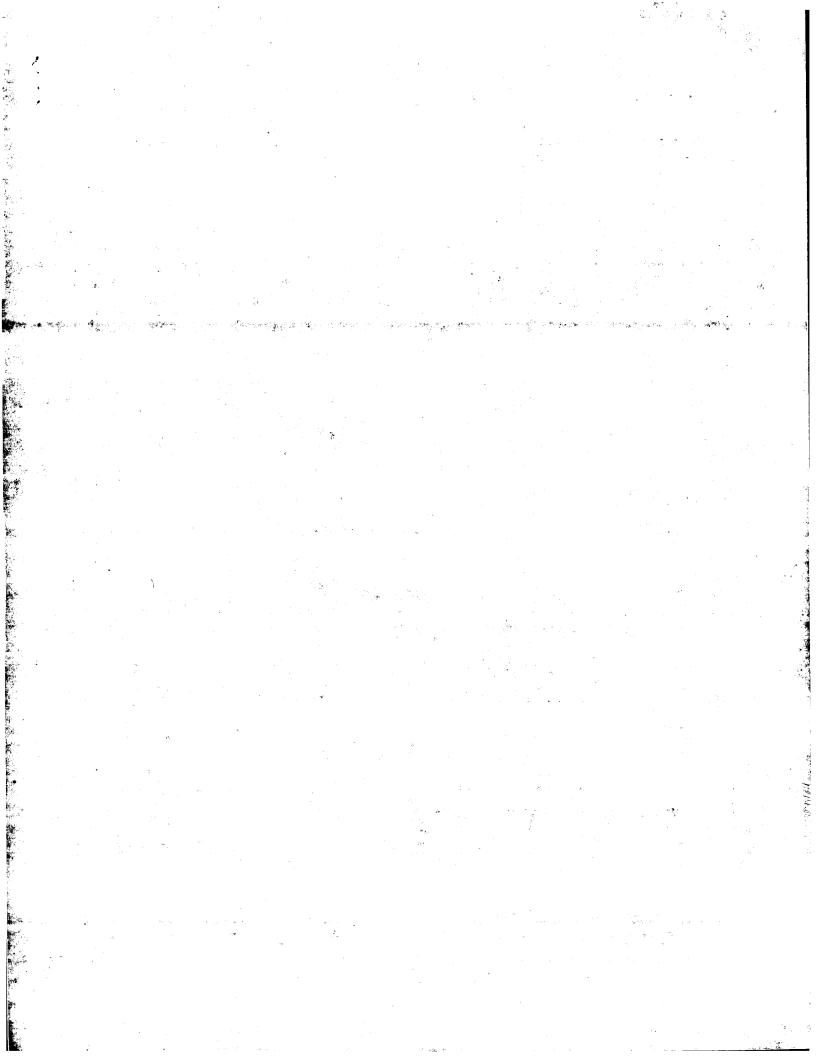
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Best Local Similarity
Matches 4; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 96417001.

Miyata S., Kihara H.K.;

"Cathepsin L-like protease from Xenopus nucleoside phosphates and nucleic acids. Zool. Sci. 12:771-774(1995).

SEQUENCE 18 AA; 2060 MW; AIDC9B106B:
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01-mAY-2000 (TrEMBLrel. 13, Created)
01-mAY-2000 (TrEMBLrel. 13, Last sequence update)
01-mAY-2000 (TrEMBLrel. 13, Last annotation updat
ACID THIOL PROTEASE (FRAGMENT).
Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=297;
Akins D.R., Popova T., Brusca J., Goldberg M.I.
Norgard M.V., Radolf J.D.;
Submitted (AUG-1994) to the EMBL/GenBank/DDBJ
EMBL; L31425; AAA64901.1; -.
Hypothetical protein.
NON_TER
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Submitted (DEC-1996) to the
EMBL; U81435; AAB60824.1; -
NON_TER 1 1
SEQUENCE 12 AA; 1279 MW;
  time:
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012088;
01-JUL-1997
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01-AUG-1998
TAT PROTEIN
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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completed:
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(AUG-1999)
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(PROSTAGLANDIN E RECEPTOR
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                     December 21,
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viruses; Retroviridae; Lent
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RECEPTOR (EP3E)) (FRAGMENT).
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Pred. No.
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Title:
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      Issued_Patents_AA:*

1: /gqn2_6/ptodata/2,

2: /cgn2_6/ptodata/2,

3: /cgn2_6/ptodata/2,

4: /cgn2_6/ptodata/2,

5: /cgn2_6/ptodata/2,
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     164575 seqs, 16761186 residues
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/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/6CTUS_COMB.pep:*
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US-08-391-671A-13
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US-08-391-671A-13
US-08-467-902A-13
US-08-467-902A-13
US-08-480-190-77
PCT-US93-07545-77
US-08-480-190-76
US-08-488-379-76
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US-08-159-340A-17
US-08-706-702-21
US-08-706-706-21
US-08-306-231-9
US-08-355-888A-25
US-08-693-697-25
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3.355 Million cell updates/sec
Sequence 25, Appl
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Sequence 12, Appl
Sequence 12, Appl
Sequence 14, Appl
Sequence 17, Appl
Sequence 12, Appl
Sequence 13, Appl
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17, Appl
21, Appl
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26, Appl
28, Appl
28, Appl
                                                             TYPE: amino a TOPOLOGY: lir MOLECULE TYPE: US-08-164-618-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20, Applicat Patent No. 5408036 GENERAL INFORMATION:
          Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 616-5400
TELEPAX: (312) 616-5460
INFORMATION FOR SEQ ID NO: 20:
                                                                                                                                                                APPLICATION NUMBER: 07/591
FILING DATE: October 2, 19
ATTORNEY/AGENT INFORMATION:
NAME: Gamson, Edward G.
REGISTRATION NUMBER: 29,38
REFERENCE/DOCKET NUMBER: S
                                                                                                                                                                                                                             FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UFFILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Ghadiri, I
TITLE OF INVENTION:
TITLE OF INVENTION: (
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
COMPUTER: IBM PC com
                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 12 amino acids
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                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/164,618
                                                                                                                                                                                                                                                                                                                                                                          CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Dressler, Goldsmith, ADDRESSEE: Milnamow, Ltd.
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amino acid
OGY: linear
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Ghadiri, M. Reza
WENTION: Isolated Metallopolypeptides:
Omnositions and Synthetic Methods
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71.48;
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US-08-488-379-191
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          Score 29; DB Pred. No. 40; 1; Mismatches
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US-08-159-340A-17
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                                                                                                                           Sequence 21, Application US/08706702
Patent NO. 5948614
GENERAL INFORMATION:
APPLICANT: Chatterjee, Deb K.
TITLE OF INVENTION: Cloned DNA Polymerases from Thermotoga
TITLE OF INVENTION: maritima and Mutants Thereof
NUMBER OF SEQUENCES: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17, Application US/08159340A Patent No. 5565352
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (512) 418-3000
TELEFAX: (512) 474-7577
INFORMATION FOR SEQ ID NO: 17:
                   STREET: Live
CITY: Washington
CTATE: DC
TTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Highlander, Steven L.
REGISTRATION NUMBER: 37,642
REFERENCE/DOCKET NUMBER: ARCD:112/HYL
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: DEUBIQUITINATING ENZYME: COMPOSITIONS TITLE OF INVENTION: AND METHODS NUMBER OF SEQUENCES: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Hochstrasser, Mark APPLICANT: Papa, Feroz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 14 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                  14 VKYGLHN 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/159,340A FILING DATE: 24-NOV-1993 CLASSIFICATION: 435
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STATE: Texas
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20005-3934
                                                                      E: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C 1100 New York Ave., N.W., Suite 600
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                 USA
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71.4%;
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Pred. No. 48;
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Query Match
Best Local Similarity
"htches 5; Conservat
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US-08-706-706-21
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 08/576,759
FILING DATE: 21-DEC-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/537,397
FILING DATE: 02-CCT-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/525,057
                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C STREET: 1100 New York Ave., N.W., Suite 600
                                                                                                                                                                                                                                                         APPLICANT: Hughes, A. John
APPLICANT: Chatterjee, Deb K.
TITLE OF INVENTION: Cloned DNA Polymerases from Thermotoga and
NUMBER OF SEQUENCES: 26
                 SOFTWARE: PatentIn Rec
CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 08-SEP-1995
ATTORNEY/AGENT INFORMATION:
NAME: Esmond, Robert W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 02-0CT-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                      CITY: Washington
STATE: DC
                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 08/689,807 FILING DATE: 14-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM:
 APPLICATION NUMBER:
                                                                                                                                 ZIP: 20005-3934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
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3 ITGDKDML 10
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SYSTEM: PC-DOS/MS-DOS
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US/08/706,706
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Pred. No. 73;
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TOPOLOGY: not relevar
: MOLECULE TYPE: peptide
US-08-706-706-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION: APPLICANT: Snodgr
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[NFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                       APPLICANT: Cioff!, Joseph
APPLICANT: Zupancic, Thomas J.
APPLICANT: Shafer, Alan W.
TITLE OF INVENTION: HU-BI.219, A NOVEL HEMATOPOIETIN
TITLE OF INVENTION: RECEPTOR
NUMBER OF SEQUENCES: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 08/576,759
FILING DATE: 21-DEC-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/537,397
FILING DATE: 02-CCT-1995
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TELEPHONE: 202-371-2600
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APPLICATION NUMBER: US 08/525,057
FILING DATE: 08-SEP-1995
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: US 08/537,400
FILING DATE: 02-OCT-1995
                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER:
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                                                                                                                              STREET: 1155 Ave
CITY: New York
STATE: New York
                                                                                                COUNTRY: USA
ZIP: 10036-2711
                                                                                                                                                                   ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
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01-JAN-1995
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JER: 0942.2800005
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RESULT 6
US-08-355-888A-25
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                                                                                                   COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/355,888A
FILING DATE: 14-DEC-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 28.462
REFERENCE/DOCKET NUMBER: 7225-078
TELEPONCET NUMBER: 7225-078
TELEPONCET NUMBER: 7225-078
TELEPONCET NUMBER: 7225-078
TELEPONCE: (212) 790-9909
TELEPAN: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 25, Application US/08355888A
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Best Local Similarity
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                         INFORMATION FOR SEQ ID NO:
                                  SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Zupancic, Thomas J.
APPLICANT: Shafer, Alan W.
TITLE OF INVENTION: Hu-B1.219, A NOVEL HUMAN HEMATOPOIETIN
TITLE OF INVENTION: RECEPTOR
NUMBER OF SEQUENCES: 31
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APPLICATION NUMBER: US/0
FILING DATE: 14-SEP-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
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                                                                                  TELEFAX: (212) 809-:
TELEX: 66141 PENNIE
                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 1155 A
CITY: New York
STATE: New Yor
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TYPE: amino acid
STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Poissant, Brian REGISTRATION NUMBER: 2
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STRANDEDNESS:
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10036-2711
                   amino acid
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US-08-693-696-25
; Sequence 25, Application US/08693696
; Patent No. 6005080
; GENERAL INFORMATION:
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Best Local Similarity
Thehes 4; Conserve
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                                                                      RESULT
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Best Local Similarity 66.7
Matches 4; Conservative
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION UMMBER: US/08/693,697
FILING DATE: 05-AUG-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: POISSANT, Brian M.
REFERENCE/DOCKET NUMBER: 8907-0037-999
TELEPHONE: 650-493-4935
TELEPHONE: 650-493-5556
TELEPA: 650-493-5556
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Zupancic, Thomas J.
APPLICANT: Shafer, Alan W.
TITLE OF INVENTION: Hu-B1.219, A NOVEL HUMAN HEMATOPOIETIN
TITLE OF INVENTION: RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Snodgrass, H. R. APPLICANT: Cioffi, Joseph
                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS
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STATE: New York
COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                     3 QIRYGL 8
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                                                                                                                                                                                                                                                                                                                               amino acid
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                                                                                                                                                                                                                                                                                                                                              13 amino acids
                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                  unknown
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66.7%;
                                                                                                                                                                                                 26.0%;
66.7%;
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                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                  Score 27; DB Pred. No. 98;
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; MOLECULE TYPE: peptide US-08-693-696-25
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TELEFAX: (214) PENNIE
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 25
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                         Sequence 28, Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Mottez, Estelle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/355,888
FILING DATE: 14-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: POISSANT, Brian M.
REGISTRATION NUMBER: 28,462
REFERENCE/DOCKET NUMBER: 7225-078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 10036-2711

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PR PC POS/MS-POS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Snodgrass, H. R.
APPLICANT: Cioffi, Joseph
APPLICANT: Zupancic, Thomas J.
APPLICANT: Shafer, Alan W.
TITLE OF INVENTION: Hu-B1.219, A NOVEL HUMAN HEMATOPOIETIN
TITLE OF INVENTION: RECEPTOR
                   STREET: 1500
CITY: Washington
CTATE: D.C.
                                                                                                                                                                   APPLICANT: Abastado, Jean-Pierre
APPLICANT: Kourilsky Philippe
TITLE OF INVENTION: An Altered Major Histocompatibility
TITLE OF INVENTION: Complex(MHC) Determinant and Method
TITLE OF INVENTION: Determinant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
 COMPUTER READABLE FORM:
                                                                                                                                 CORRESPONDENCE ADDRESS:
STATE: D.C.
STATE: D.C.
9TP: 20005-3315
                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 QVKYGL 18
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TOPOLOGY: unknown
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                                                                         ADDRESSEE: Finnegan, Henderson, Farabow, ADDRESSEE: Dunner STREET: 1300 I Street, N.W., Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                             3 QIRYGL 8
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5976551
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Pred. No.
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                                                                                                                                                                                             and Methods
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                                                                                                                                    STREET: 1300 I Street, N.W., Suite 700
CITY: Washington
STATE: D.C.
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 28, Application US/08481985B Patent No. 6011146 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/801,818
FILING DATE: 05-DEC-1991
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/792,473
FILING DATE: 15-NOV-1991
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 202-408-4400
NFORMATION FOR SEQ ID NO:
               APPLICATION NUMBER: US/08/481,985B FILING DATE: 07-JUN-1995 CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 07/801,818 FILING DATE: 05-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Abastado, Jean-Pierre
APPLICANT: Kourilsky, Phillipe
TITLE OF INVENTION: Altered Major Histocompatibility Complex
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Mottez, Estelle APPLICANT: Abastado, Jean-I APPLICANT: Kourilsky, Phill
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 38.5%; tes 5; Conservation
                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & ADDRESSEE: Dunner STREET: 1300 I Street, N.W., Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Potter, Jane E. R.
REGISTRATION NUMBER: 33,332
REFERENCE/DOCKET NUMBER: 03495.0106-03000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08 FILING DATE: 07-JUNE-1995 CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS-/MS-DOS
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 TSEGCRQILGQLQ 15
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Pred. No. 1.7e+0
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RESULT 12
5304631-16
; Patent NO. 5304631
; APPLICANT: STEWART, JOHN M.: HAHN, KARL W.:. KLIS, WIESLAW A.:
TITLE OF INVENTION: SYNTHETIC HELIZYME ENZYMES
; NUMBER OF SEQUENCES: 16
; CURRENT APPLICATION DATA:
; CURRENT APPLICATION DATA:
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5304631-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: STEWART, JOHN M.; HAHN, KARL TITLE OF INVENTION: SYNTHETIC HELIZYME NUMBER OF SEQUENCES: 16
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/464,932
ETILING DATE: 16-JAN-1990
SEQ ID NO:8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Patent No. 5304631
                                                                                                                                                                      FILING DATE: 16-JAN-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPAX: 202-400 ... 28
INFORMATION FOR SEQ ID NO: 28
SEQUENCE CHARACTERISTICS:
FRIGHH: 15 amino acids
                                                           Query Match
Best Local S
Matches 6
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Best Local Similarity
Matches 6; Conserv
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Best Local Similarity 38.5%;
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 0: FILING DATE: 15-NOV-1991 CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: pept
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03
                                                                                                                                                        LENGTH: 15
                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                            5 EKAMMLLGQVK 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 15
                            5 EKAMMLLGQVK 15
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                                                           Similarity 6; Conserv
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                                                           Conservative
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                                                                          25.0%;
54.5%;
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                                                          Score 26; DB 5;
Pred. No. 1.7e+02;
2; Mismatches
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Pred. No. 1.7e+02;
2; Mismatches 3; Indels
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Pred. No. 1.7e+02;
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                                                                                        Length 15;
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US-08-218-025A-12
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US-08-182-067-14
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GENERAL INFORMATION:
                                                                                                                                                                                                                                 Sequence 14, Application US/08182067
Patent No. 5985279
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/218,025A
FILING DATE: 24-MAR-1994
CLASSIFICATION: 424
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/891,451
APPLICATION NUMBER: US 07/891,451
APPLICATION NUMBER: US 07/891,451
APPLICATION NUMBER: US 07/891,451
APPLICATION NUMBER: US 07/891,451
APPLICATION NUMBER: US 07/891,451
APPLICATION NUMBER: US/08/218,025A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy (
COMPUTER: IBM PC com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 19 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Weiner, David B.
APPLICANT: Ugen, Kenneth E.
APPLICANT: Williams, William V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: WS
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 540-9206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 16 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide
                                                                                                                                                                              APPLICANT: SIMS, MARTIN APPLICANT: CROWE, SCOTT
                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                           TITLE OF INVENTION: HUMANIZED ANTIBODY AGAINST CD18
                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                   APPLICANT: WALDMANN, HERMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid TOPOLOGY: unknown
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                                                                          E: Rothwell, Figg Ernst & Kurz
Suite 701-E, 555 Thirteenth St., N.W
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ER: WST33A
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; MOLECULE TYPE: protein US-08-182-067-14
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US-08-465-313-14
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Patent No. 5997867
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Best Local :
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APPLICANT: WALDMANN, HERMAN
APPLICANT: SIMS, MARTIN J.
APPLICANT: CROWE, J. SCOTT
TITLE OF INVENTION: HUMANIZED ANTIBODY AGAINST CD18
NUMBER OF SEQUENCES: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (202)783-6031 INFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER: US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: GB 9: FILING DATE: 16-JUL-1991 ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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ADDRESSEE: HAMILTON,
                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/182,067
EILING DATE: 23-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/
FILING DATE: 15-JUL-1992
PRIOR APPLICATION DATA:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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#FILEDATION NUMBER: GB 915364.3

FILEDATI INFORMATION:
MANE: BROOK, MANUE P.
REGISTATION NUMBER: B2.592

FREEDAMINICATION INFORMATION:
MARKE BROOK, MANUE P.
REGISTATION NUMBER: B2.592

FREEDAMINICATION INFORMATION:
TELEPHONE: G6179 850 ID NO: 14:
SEQUENCE COMMARTERISTICS:
TENDIN IL O maino acids
TOPOLOGY: Linear

TOPOLOGY: Linear

TOPOLOGY: Linear

NOLECULE TYPE: protein

Guery Malch
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Copyright (c) 1993 - 2000 Compugen Ltd.
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Query Match 23.1%; Score 24; DB 2; Length 15; Best Local Similarity 60.0%; Pred. No. 8.1e+02; Matches 6; Conservative 1; Mismatches 3; Indels 0; Gaps Qy 3 TGEKAMMILG 12	RESULT 2 PA0091 methionine adenosyltransferase (EC 2.5.1.6) 2 - fungus (Fusarium sporotrichio C;Species: Fusarium sporotrichioides C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 05-May-2000 C;Accession: PA0091 R;Chow, L.P.; Fukaya, N.; Sugiura, Y.; Ueno, Y.; Tabuchi, K.; Tsugita, A. submitted to JIPID, October 1994 A;Reference number: PA0051 A;Accession: PA0091 A;Holecule type: protein A;Residues: 1-15 <cho> C;Keywords: S-adenosylmethionine; transferase</cho>	Query Match 25.0%; Score 26; DB 2; Length 18; Best Local Similarity 41.2%; Pred. No. 4.5e+02; Matches 7; Conservative 1; Mismatches 1; Indels 8; Gaps Qy 11 LGQVKYGLH 19	RESULT 1 152823 hypothetical protein TCR delta [imported] - human (fragment) C;Species: Homo sapiens (man) C;Date: 01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change 20-Jun-2000 C;Accession: 152623 R;Przybylski, G;Oettle, H.; Ludwig, W.D.; Siegert, W.; Schmidt, C.A. Br. J. Haematol. 87, 301-307, 1994 A;Title: Molecular characterization of illegitimate TCR delta gene rearrang A;Reference number: 152623; MUID:95034253 A;Accession: 152623 A;Status: preliminary; translated from GB/EMBL/DDBJ A;Residues: 1-18 <res> A;Cross-references: GB:S73537; NID:9688155 C;Genetics: A;Gene: TCRdelta</res>	ALIGNMENTS	30 20 19.2 13 2 PH1772
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T-cell receptor beta chain (clone 22/3) - """ (c.species: Mus musculus (house mouse) (c.species: Mus musculus (house mouse) (c.species: Mus musculus (house mouse) (c.species: Mus musculus (house mouse) (c.species: Mus musculus (house mouse) (c.species: Mus musculus (house mouse) (c.species: Mus musculus (house mouse) (c.species: Mus musculus (house mouse) (c.species: Mus musculus (house musculus (house) (house musculus (house) (house mouse) (c.species: Mus musculus (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (house mouse) (hou
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Arch. Biochem. Biophys. 167, 525-533, 1975
A;Title: Isolation of a peptide containing a
A;Reference number: A11497; MUID:75145197
A;Accession: A11497
                                                                                                                                                                                                                                                                                                                                                                                       transaldolase (EC 2.2.1.2) III - yeast (Pichia jadinii) (fragment) C;Species: Pichia jadinii, Candida utilis C;Date: 05-Jun-1987 #sequence_revision 05-Jun-1987 #text_change 30-Sep-1993 C;Accession: A11497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Experimental source: cytolytic T-lymphocyte C; Superfamily: immunoglobulin homology C; Keywords: receptor; T-cell
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A;Molecule type: mRNA A;Residues: 1-16 <CAS>
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A;Accession: PC4213
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R;Sylvestre, M.; Sirois, M.; Hurtubise, Y.; Bergeron, J.; Ahmad, D.; Shareck, Gene 174, 195-202, 1996
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C;Species: Comamonas testosteroni
C;Date: 17-Dec-1996 #sequence_revision 21-Jan-1997 #text_change 08-Oct-1999
                                                                                                                             C; Keywords: transferase
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A;Gene: bphB
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A;Residues: 1-15 <SYL>
A;Cross-references: GB:U47637; NID:g1245151;
A;Experimental source: strain B-356
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Pred. No. 8.7e+02
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R;Rommel, T.O.; Hund, H.K.; Speth, A.R.; Lingens,
Biol. Chem. Hoppe-Seyler 370, 763-768, 1989
A;Title: Purification and N-terminal amino-acid s
**Pefference number: S04956; MUID:89374824
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                                                                                                                                                        malate dehydrogenase (EC 1.1.1.37) - Kibdelosporangium aridum (fragment) C;Species: Kibdelosporangium aridum C;Species: Kibdelosporangium aridum C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 02-Aug-1
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A;Reference number: PH0746; MUID:92078846
A;Accession: PH0797
A;Molecule type: mRNA
A;Residues: 1-15 <CAS>
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A;Residues: 1-10 <FUK>
A;Experimental source: LLC-PK1 cells
C;Keywords: NAD; oxidoreductase
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A;Experimental source: T lymphocyte
C;Keywords: T-cell receptor
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A; Molecule type: protein
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C; Keywords:
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A;Experimental source: ATCC 29050
A;Note: sequence extracted from NCBI backbone (NCBIP:103673)
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Blol. Chem. Hoppe-Seyler 370, 763-768, 1989
A;Title: Purification and N-terminal amino-acid sequences of bacterial malate dehydrogen A;Reference number: S04956; MUID:89374824
A;Accession: S04958
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C; Superfamily: L-lactate dehydrogenase
C; Keywords: oxldoreductase; tricarboxy.
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J. Gen. Microbiol. 138, 779-786, 1992
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g heavy chain DJ region (clone C372-115) - human (fragment)
;Species: Homo sapiens (man)
;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_cha
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4; Conserv
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57.1%;
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57.1%;
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Pred. No.
1; Mismatc
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Pred. No.
                                                                                                                                                                                         Score 23; DB 2; L
Pred. No. 1.6e+03;
1; Mismatches 2;
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2;
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l.6e+03;
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 #text_change
                                                                                                                                                                                                                          Length 20;
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 07-May-1999
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Z protein - guinea pig (fragment)
C;Species: Cavia porcellus (guinea pig)
C;Date: 19-Mar-1997 #sequence_revision 24-Mar-1999 #text_change 24-Mar-1999
C;Accession: $23168
R;Nicollier, M.; Roblin, S.; Cypriani, B.; Remy-Martin, J.P.; Adessi, G.L.
Eur. J. Biochem. 205, 1137-1144, 1992
A;Title: Purification and characterization of a binding protein related to the Z clas
                          C; Superfamily: crabrolin
C; Keywords: amidning
                                                                A; Molecule type: protein A; Residues: 1-14 <TUI>
                                                                                                                                                        R;Tuichibaev, M.U.; Akhmedova, N
Biochemistry (N.Y.) 53, 183-190,
A;Title: Low-molecular weight pe
                                                                                                                                                                                                                          A; Molecule type: protein A; Residues: 1-14 <MIR>
                                                                                                                                                                                                                                                                     R;Miroshnikov, A.I.; Snezhkova, Bioorg. Khim. 7, 1467-1477, 1981 A;Title: Structure and propertie A;Reference number: JN0389 A;Accession: JN0390
                                                                                                                                                                                                                                                                                                                                                                                                      C;Species: Vespa orientalis (oriental hornet)
C;Date: 15-Jan-1993 #sequence_revision 15-Jan-1993 #text_change 23-Aug-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
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A;Residues: 1-20 <WAS>
C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R:Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, J. Exp. Med. 176, 1577-1581, 1992
A:Title: Predominance of fetal type DJH joining in young chi: A;Reference number: PH1302; MUID:93094761
A;Accession: PH1338
F;14/Modified site: amidated carboxyl end (Leu) #status
                                                                                                               A; Reference number: S06445
A; Accession: S10919
                                                                                                                                                                                                                                                                                                                                                                                        C; Accession: JN0390; S10919
                                                                                                                                                                                                                                                                                                                                                                                                                                                        histamine releasing peptide II - oriental hornet N;Alternate names: venom protein HR-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JN0390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Function:
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Best Local
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                          amidated carboxyl end; venom
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80.0%;
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                                                                                                                                                        peptides of venom of the giant hornet Vespa orientalis
                                                                                                                                                                                    N.U.;
0, 1988
                                                                                                                                                                                                                                                                                                                                                             L.G.; Nazimov, I.V.; Reshetova, O.I.; Rozinov, B.V.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
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Pred. No. 1.4e+03;
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Pred. No. 1.6e+03;
5; Mismatches 2
                                                                                                                                                                                                   Kazakov, I.; Korneev, A.S.; Gagel'gans, A.I.
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experimental

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RESULT 14
S72217
S72217
D-arabinose 1-dehydrogenase (NAD(P)+) (EC 1.1.1.117) - yeast (Candida albicans) (fragmen C.Species: Candida albicans
C.Species: Candida albicans
C.Accession: S72217
R;Kim, S.T.; Huh, W.K.; Kim, J.Y.; Hwang, S.W.; Kang, S.O.
Biochim. Biophys. Acta 1297, 1-8, 1996
A;Title: D-arabinose dehydrogenase and biosynthesis of erythroascorbic acid in Candida a, Reference number: S72217; MUID:96439039
A;Roccession: S72217; MUID:96439039
A;Roccession: S72217; MUID:96439039
                                                                                                                                                                                                                                                                                                                                    transcription factor HNF-3 beta - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 07-May-1999
C:Accession: A49887
R:Sasaki H: Hogan, B.L.M.
Cell 76, 103-115, 1994
A:Title: HNF-3beta as a regulator of floor plate development.
A:Reference number: A49887; MUID:94116056
A:Accession: A49887
A:Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: protein
A; Residues: 1-14 <KIM>
C; Keywords: oxidoreductase
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A49887
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Search completed: December 21, 2000, 08:30:08 Job time: 272 sec
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Best Local Similarity 40.0%;
Matches 4; Conservative
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Best Local Similarity 30.8%;
Matches 4; Conservative
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Best Local Similarity 55.0
Matches 5; Conservative
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4 ASSMLGAVK 12
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Pred. No. 1.7e+03;
4; Mismatches 2
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Pred. No. 1.7e+03;
4; Mismatches 5
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P17232 vespa manda
P82071 litoria cae
P35634 bartonella
O316834 trichophyto
O31159 spiroplasma
P33588 agkistrodon
P80335 oncorhynchu
P80983 thunnus obe
P81818 carcinus ma
P12381 klebsiella
P37041 alligator m

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Title:
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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TSOLAS O., Sun S.C.:

"Isolation of a peptide containing a histidinyl-cysteinyl sequence

"Isolation of a peptide containing a histidinyl-cysteinyl sequence
from the active center of transaldolase.";
Arch. Biochem. Biophys. 167:525-533(1975).

-i- FUNCTION: TRANSALDOLASE IS IMPORTANT FOR THE BALANCE OF
                                                                                                                                                                                            TAL3_PICJA STANDARD; PRT; 9 AA. P17441; 01-AUG-1990 (Rel. 15, Created) 01-AUG-1990 (Rel. 15, Last sequence update) 01-FEB-1994 (Rel. 28, Last annotation update) TRANSALDOLASE III (EC 2.2.1.2) (FRAGMENT). Pichia jadinii (Yeast) (Candida utilis). Eukaryota; Fungi; Ascomycota; Saccharomycetes; Saccharomycetaceae; Pichia.
                                                                                                                                                                                                                                                                                                                                                                                         _PICJA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- FUNCTION: MAY ACT AS A NEUROTRANSMITTER OR NEUR-
-!- SIMILARITY: BELONGS TO THE ALLATOSTATIN FAMILY
Neuropeptide; Amidation; Multigene family.
MOD_RES
8
AMIDATION (POTENTIAL)
SEQUENCE 8 AA; 858 MW; C82879D5AB46D865 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Carcinus maenas (Common shore crab) (Green crab).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malaco
Eumalacostraca; Eucarida; Decapoda; Pleocyemata;
Eubrachyura; Portunoidea; Portunidae; Carcinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Isolation and identification of multiple neuropeptides of the allatostatin superfamily in the shore crab Carcinus maenas."; Eur. J. Biochem. 250:727-734(1997).
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8.8e+04;
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OR NEUROMODULATOR

Jaros P.P.,

Length

80

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Saccharomycetales;

8 ⋛

Malacostraca;

Brachyura;

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RESULT 4
MDH_MICGL
ID MDH_M
AC P1997
DT 01-FE
DT 01-FE
DT 30-MA
DE MALAT
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P19978;
01-FEB-1991
MDH_MICGL STANDARD; PRT;
P19979;
01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence up
30-MAY-2000 (Rel. 39, Last annotation
MALATE DEHYDROGENASE (EC 1.1.1.37) (FF
                                                                                                                                                                                                                                                                                                                dehydrogenases from six actinomycetales strains and from phenylobacterium immobile, strain E."; Biol. Chem. Hoppe-Seyler 370:763-768(198).
-i- CATALYTIC ACTIVITY: L-MALATE + NAD(+) = OXALOACETATE
-i- SIMILARITY: BELONGS TO THE LDH FAMILY. MDH SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           METABOLITES IN THE PENTOSE-PHOSPHATE PATHWAY.

-I- CATALYTIC ACTIVITY: SEDOHEPTULOSE 7-PHOSPHATE + D-GLYCERALDEHYDE 3-PHOSPHATE = D-ERYTHROSE 4-PHOSPHATE + D-FRUCTOSE 6-PHOSPHATE.

-I- PATHWAY: NONOXYDATIVE PART OF THE PENTOSE-PHOSPHATE PATHWAY.

-I- SIMILARITY: BELONGS TO THE TRANSALDOLASE FAMILY.

PIR: Al1497: Al1497.
                                                                                                                                                                                                                               PROSITE; PS00068; MDH; PARTIAL. oxidoreductase; Tricarboxylic a NON_TER 20 20 20 SEQUENCE 20 AA; 1989 MW; 79
                                                                                                                                                                                                                                                                               HSSP; P105
INTERPRO;
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01-FEB-1991 (Rel. 17, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation updat
MALATE DEHYDROGENASE (EC 1.1.1.37) (FRAGMEN
                                                                                                                                                                                                                                                                                                                                                                                                                                               Kibdelosporangium aridum.
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Actinomycetales; Pseudonocardineae; Pseudonocardiaceae;
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                                                                                                                                                                                                                                                                                           PIR; S04961; S04961.
HSSP; P10584; 1BDM.
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3; Conserv
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Best Local
                                                                                                                                                                               Lsolation and identification of multiple neuropeptides of the allatostatin superfamily in the shore crab Carcinus maenas.";
Eur. J. Biochem. 250:727-734(1997).
-i- FUNCTION: MAY ACT AS A NEUROTRANGMITTER OR NEUROMODULATOR.
-i- SIMILARITY: BELONGS TO THE ALLATOSTATIN FAMILY.
Neuropeptide; Amidation; Multigene family.
MOD_RES
9
AMIDATION
SEQUENCE 9 AA; 927 MT.
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P81814;
90-MAY-2000 (Re
30-MAY-2000 (Re
30-MAY-2000 (RC
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Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyu
Eubrachyura; Portunoidea; Portunidae; Carcinus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Microtetraspora glauca.
Bacteria; Firmicutes; Actinobacteria;
Actinomycetales; Streptosporangineae;
Microtetraspora.
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Carcinus maenas (Common shore crab)
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HSSP; P10584; 1BDM.
INTERPRO; IPR001236; -.
INTERPRO; IPR001252; -.
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(Rel. 39, Last annotation
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8.1e+02;
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Streptosporangiaceae;
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                                                                                                                                                                                                                                                                                          N-acetyl-D-galactosamine-binding lectin from Dutch Iris recognizes the blood group A disaccharide (GalNAc alpha J. Biol. Chem. 269:7666-7673(1994).

-i- FUNCTION: GAL / GALNAC-SPECIFIC LECTIN. AGGLUTINATES AND TRYPSIN-TREATED RABBIT ENYTHROCYTES BUT NOT HUMPAND TRYPSIN-TRYPSIN-TREATED RABBIT ENYTHROCYTES BUT NOT HUMPAND TRYPSIN-TRYPHOLOGICA RABBIT ENYTHROCYTES BUT NOT HUMPAND TRYPHOLOGICA RABBIT RABBIT ENYTHROCYTES BUT NOT HUMPAND TRYPHOLOGICA RABBIT RABBIT RABBIT RABB
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MO H., van Damme E.J.M., Peumans W.J., Goldstein I.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BINDING LECTIN SUBUNIT B) (FRAGMENT). Iris hollandica (Dutch iris). Eukaryota; Viridiplantae; Embryophyta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
01-JUN-1994 (Rel. 29, Last annotation update)
N-ACETYL-D-GALACTOSAMINE-BINDING LECTIN SUBUNIT B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vespa orientalis (Oriental hornet).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Hymenoptera; Apocrita; Ac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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Magnoliophyta; Liliopsida; Asparagales; Iridaceae; Iris
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-I- FUNCTION: MAST CELL DEGRANULATING E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Miroshnikov A.I., Snezhkova L.G., Nazimov I.V., Reshetova Rozynov B.V., Gushchin I.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-AUG-1990 (Rel. 15, Created)
01-AUG-1990 (Rel. 15, Last sequence update)
01-AUG-1990 (Rel. 15, Last annotation update)
HISTAMINE RELEASING PEPTIDE II (HR-II)
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4; Conserv
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Vespidae;
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Pred. No. 8.4e+02;
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Best Local S
Matches 4
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p17231;
01-AUG-1990 (Rel. 15, Create
01-AUG-1990 (Rel. 15, Last s
15-DEC-1998 (Rel. 37, Last a
VESPID CHEMOTACTIC PEPTIDE T
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P81819;
30-MAY-2000 (Rel. 39, 0
30-MAY-2000 (Rel. 39, 1
30-MAY-2000 (Rel. 39, 1
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Vespoidea;
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Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
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Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura;
Eubrachyura; Portunoidea; Portunidae; Carcinus.
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TISSUE=CEREBRAL
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                                                                                                                                                                                                      SEQUENCE
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LLGOVKYGL
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Sakakibara S. (ec
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                                                                                                                                                                                                                                 degranulation;
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                                                                                                                                                                                                                                                             Chemotaxis;
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Eukaryota; Metazoa;
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MOD_RES 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE;
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                                            Amphibian
MOD_RES
SEQUENCE
                                                                                                                                                                                               Rana temporaria (European common frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea;
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30-MAY-2000 (Rel.
30-MAY-2000 (Rel.
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SIMILARITY: BELONGS TO
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SIMILARITY: BELONGS TO
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zoa; Chordata;
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a; Neobatrachia; Ranoidea;
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Ranidae; Rana
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    DCMM_PSECA
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Mammalia; E
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P20304;
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01-FEB-1991 (Rel. 17, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
01-OCT-1996 (Rel. 34, Last annotation update)
ISOCITRATE DEHYDROGENASE [NADP] CYTOPLASMIC (EC 1.1.1.42)
(OXALOSUCCINATE DECARBOXYLASE) (IDH) (NADP+-SPECIFIC ICDH)
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MEDLINE; 87308293.

MEDLINE; 87308293.

Bailey J.M., Colman R.F.;

"Isolation of the glutamyl peptide labeled by the nucl
"Isolation of the glutamyl peptide labeled by the nucl
2.(4-bromo-2,3-dioxobutylthio)-1,N(6)-ethenoadenosine
2.(5'-biphosphate in the active site of NADP+-specific
dehydrogenase.";

"Expression of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the 
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"Characterization of an active site peptide modified by the substrate analogue 3-bromo-2-ketoglutarate on a single chain of dimeric NADP+-dependent isocitrate dehydrogenase.";

J. Biol. Chem. 262:12614-12619(1987).

-i- CATALYTIC ACTIVITY: ISOCITRATE + NADP(+) = 2-OXOGLUTARATE +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sus scrofa
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Ehrlich R.S., Coln
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Bradyrhizobium [1]
                                         pseudomonas carboxydovorans.
Bacteria; Proteobacteria; alpha subdivision;
Bradyrhizobium group; Oligotropha.
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n; Metazoa;
Eutheria;
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ARGININE/ORNITHINE A
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Arch. Microbiol. 152:335-341(1989).
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Arch. Microbiol. 152:335-341(1989).
-!- CATALYTIC ACTIVITY: CO + H(2)O + 2 H(+) + FERRICYTOCHROME B-561.
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01-FEB-1991 (Rel. 17, Last sequence update)
01-DEC-1992 (Rel. 24, Last annotation update)
CARBON MONOXIDE DEHYDROGENASE MEDIUM CHAIN (EC
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Bacteria; Proteobacteria.
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STRAIN=ATCC 4359;
Wilson S.D., Wang M., I
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mitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.
FUNCTION: CATALYZES AN ELECTRONEUTRAL EXCHANGE BETWEEN ARGININE
AND ORNITHINE TO ALLOW HIGH-EFFICIENCY ENERGY CONVERSION IN THE
ARGININE DEIMINASE PATHWAY.
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SIMILARITY: BELONGS TO
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O1-JUL-1997 (TrEMBLrel. 04, Created)
O1-JUL-1997 (TrEMBLrel. 04, Last sequence update)
O1-NOV-1998 (TrEMBLrel. 08, Last annotation update)
NADH DEHYDROGENASE (EC 1.6.99.3) (CYTOCHROME C REDUCTASE)
                                                                                                                                                                        WEDLINE; 95288362.

Van Damme E.J., Goossens K., Smeets K., van Leuven F., Verhaert Peumans W.J.;

"The major tuber storage protein of araceae species is a lectin. Characterization and molecular cloning of the lectin from Arum maculatum L.";

Plant Physiol. 107:1147-1158(1995).

SEQUENCE 19 AA; 2066 MW; F9C18865CA5860BA CRC64;
                                                                                                                                                                                                                                                             095866 PRELIMINARY; PRT; 19 AA. 095866; 01-MAY-2000 (TrEMBLrel. 13, Created) 01-MAY-2000 (TrEMBLrel. 13, Last sequence update) 101-JUN-2000 (TrEMBLrel. 14, Last annotation update) TYPE 2 LECTIN (FRAGMENT). Colocasia esculenta (Elephant's ear) (Taro). Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Magnoliophyta; Liliopsida; Araceae; Colocasia.
       (TYPE I DEHYDROGENASE)
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Q25355 locusta mig
Q84247 polyomaviru
O9txc8 locusta miq
Q84372 simian viru
Q9uci8 homo sapien
Q84353 simian viru
Q9uci8 homo sapien
Q84353 simian viru
Q52748 anabaena sp
Q9twf6 artemia (br
Q9qvb0 rattus sp.
Q06140 neisseria m
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Q9twk7 trypanosoma
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Q9r987 nitrosospir
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Q9qxp9 mus musculu
Q34197 rickettsia
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01-JAN-1998
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Curr. Genet. 31:414-418(1997).
-i- CATALYTIC ACTIVITY: NADH + ACCEPTOR
-i- COFACTOR: FLAVOPROTEIN; IRON-SULFUR.
EMBL; Y07814; CAA69147.1; -.
                                                                                                                                                                                                                                                                                                                              Q9S8U7;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation updat
SOLANIDINE UDP-GLUCOSE GLUCOSYLTRANSFERASE, SGT=1
Streptomyces
           LEUA.
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                                                                                                                                                                                                      Protein Expr. SEQUENCE 17
                                                                                                                                                                                                                                Stapleton A., Allen "Partial amino acid glucosyltransferase
                                                                                                                                                                                                                                                                                      Solanum tuberosum (Potato).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta;
Magnoliophyta; eudicotyledons; Asteridae; euasterids
Solanaceae; Solanum.
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Haematococcaceae; Chlorogonium
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"The apocytochrome-b gene in
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AA; 1783 MW; 75BADCB0077E593C
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Bacteria; Proteo
Shigella.
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Q53545;
01-NOV-1996
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01-MAY-2000 (
01-JUN-2000 (
                          in the
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MEDLINE; 95394812.
Nakayama S., Watanabe
"Involvement of cpxA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 urchin glycoproteins bearing sulphated poly(sialic polysaccharides rich in N-glycolyl neuraminic acid. Biochimie 78:171-182(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Karamanos N.K., Manouras A., Anagnostides S., Makatsori E. Tsegenidis T., Antonopoulos C.A., "Isolation, biochemical and immunological characterisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
SIALOPROTEIN I (FRAGMENT).
Sphaerechinus granularis (Purple sea urchin).
Eukaryota; Metazoa; Echinodermata; Echinozoa; Echinoidea;
Euechinoidea; Echinacea; Temnopleuroida; Toxopneustidae;
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gene.";
J. Bacteriol. 177:5062-5069(1995).
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Potter C.A.,
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                                       vement of cpxA, a sensor pH-dependent regulation
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"Studies on the mechanism of early onset mcular degeneration cynomolgus (Macaca fascicularis) monkeys. I. Abnormal concentr of two proteins in the retina.";

Exp. Eye Res. 62:211-219(1996).

SEQUENCE 17 AA; 1671 MD.
                                                                                                                                                                                                                                                                      01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 14, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last sequence update)
GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE (FRAGMENT)
Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosta
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAY 2000 (TrEMBLrel. 13, Created)
01-MAY 2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
SIALOKININ I PREPROPROTEIN (FRACMENT).
Aedes aegypti (Yellowfever mosquito).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
                                                                                                                                                                                                                                                            Cercopithecinae;
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7; Conserv
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Q9R5L1;
Q1-MAY-2000
Q1-MAY-2000
Q1-JUN-2000
                                                                                                                                                                              MEDLINE; 9226857.
MEDLINE; 9226857.
Thompson M.W., Strohl W.R., Floss H.G.;
Thompson M.W., Strohl W.R., Floss H.G.;
Purification and characterization of TDP-D-glucose
"Purification and characterization of TDP-D-glucose
from anthracycline-producing streptomycetes.";
from anthracycline-producing streptomycetes.";
from Microbiol. 138:779-786(1992).
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Q9R4A3;
01-MAY-2000
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Streptomyces peucetius.
Bacteria; Firmicutes; Actinobacteria; Actinobacteride
Actinomycetales; Streptomycineae; Streptomycetaceae;
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N-acetyl-D-neuraminic acid lyase generates the sial colominic acid biosynthesis in Escherichia coli Kl." Biochem. J. 317:157-165(1996).
SEQUENCE 19 AA; 2061 MW; 72022247A20EBBE3 CRC64;
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01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
N-ACETYL-D-NEURAMINIC ACID LYASE (EC 4.1.3.3) (FRAGMENT).
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(TrembLrel. 13, Last sequence update)
(TrembLrel. 14, Last annotation update)
'-DIPHOSPHATE D-GLUCOSE 4,6-DEHYDRATASE
                                                                                     Conservative
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                                                                                   Score 23; DB Pred. No. 2.76
1; Mismatches
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Pred. No. 2.6e
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3; Mismatches
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2.6e+03;
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RESULT Q05403

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01-NOV-1996
01-NOV-1996
01-NOV-1998
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Q9T2S1;
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EMBL; XE
NON_TER
                   AFAACYTIN CHAIN RCM-BETA (FRAGMENT).
Cerastes Cerastes (Horned desert viper).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
                                                                     O9PRM8 PRELIMINARY; PRT; 18 AA.
O9PRM8; PRT 18 AA.
01-MAY-2000 (TrEMBLrel 13, Created)
01-MAY-2000 (TrEMBLrel 13, Last sequence update)
01-MAY-2000 (TrEMBLrel 13, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
01-NOV-1998 (TREMBLREL)
08, Last annotation update)
DNA FOR ORE'S FROM CHROMOSOME XV (FRAGMENT).
Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycetes; Sacc
          Lepidosauria; Squamata
Viperidae; Viperinae;
                                                                                                                                                                                                                                                                                                        Braun H.P., Kruft V., So
Planta 193:99-106(1994)
SEQUENCE 17 AA; 1870
                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                     Mitochondrion.

Bukaryota; Viridiplantae; Embryophyta; Tro
Bukaryota; eudicotyledons; Asteridae;
Magnoliophyta; eudicotyledons; Asteridae;
Solanaceae; Solanum.
                                                                                                                                                                                                                                                                                                                                                                                                                        Solanum tuberosum (Potato).
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
CYTOCHROME-C REDUCTASE 55 KDA SUBUNIT (EC 1,10.2.2)
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STRAIN=FY1679
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75.0%;
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           Cerastes
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Pred. No. 3e+0
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3e+05;
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ae; euasterids
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I; Solanales;
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RESULT Q9S901 ID Q0S 901 OO Q0 P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C P P OO C
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Q9S901;
01-MAY-2000
01-MAY-2000
01-MAY-2000
C6 PEPTIDE.
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Q36277;
Q1-NOV-1996
Q1-NOV-1996
Q1-MAY-2000
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Eur. J. Biochem. 233:756-765(1995).
SEQUENCE 18 AA; 1937 MW; CF680343EFE55327 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mitochondrion.
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NAY-2000 (TrEMBLrel. 13, Last annotation update)
NADH DEHYDROGENASE SUBUNIT I (FRAGMENT).
                                                           Eukaryota; Viridiplantae; Embry Magnoliophyta; eudicotyledons;
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STRAIN=FRB73; TISSUE=HYPOCOTYL;
                                        Papilionoideae;
                                                                                                      Vigna sinensis (Cowpea).
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/ta; Liliopsida;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                             (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                      (TrEMBLrel.
                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                            11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22:5745-5752(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2082 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                            21
62
                                                                                                                                                                                                                                                                                                                                                                                                                                          59
                                                                                                                                             13,
                                                              Embryophyta;
dons; Rosidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Embryophyta; Tracheophyta; Poales; Poaceae; Zea.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Poales;
                                                                                                                                                                                      Created)
                                                                                                                                             Last sequence up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 22;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C2DA5548846188D3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                19
                                                              Tracheophyta; eurosids I; F
                                                                                                                                                                                                                                                                                                                                                                                                                                            w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 13;
3.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA
                                                                                                                                                                                                                                AA
                                                                                                                                                                                                                                                                                                                                                                                                                                        .8e+03;
                                                                                                                                                                update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             8,
                                                                                                                                             update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                Fabales;
                                                                                 Spermatophyta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Spermatophyta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                              Fabaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (horned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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Search completed: December 21, 2000, 08:35:40 Job time: 603 sec	Qy 9 MLLGOVKYGL 18	Query Match 21.2%; Score 22; DB 10; Length 19; Best Local Similarity 50.0%; Pred. No. 3.8e+03; Matches 5; Conservative 2; Mismatches 3; Indels 0; Gaps 0;	RA Hirano H., Kagawa H., Okubo K.; RL Phytochemistry 31:731-735(1992). SQ SEQUENCE 19 AA; 1989 MW; 6281AFF927726D74 CRC64;

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